



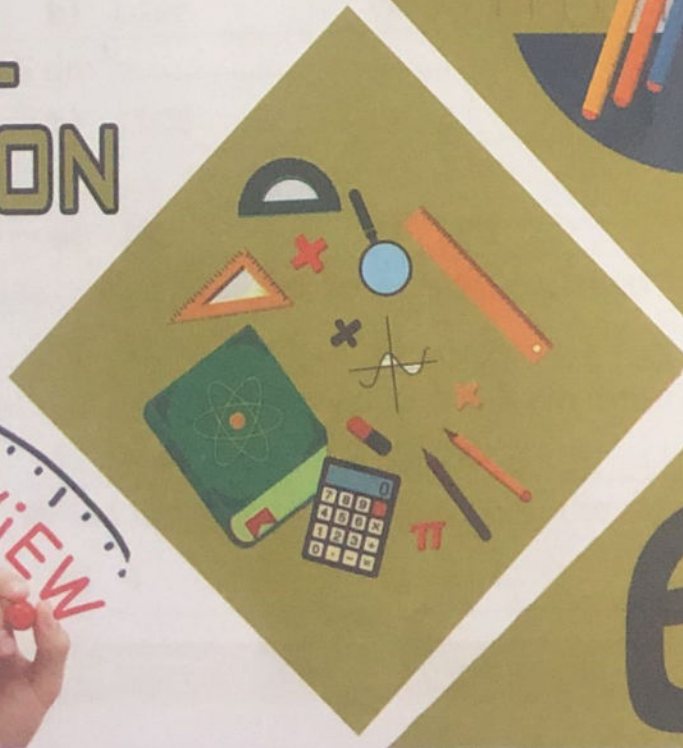
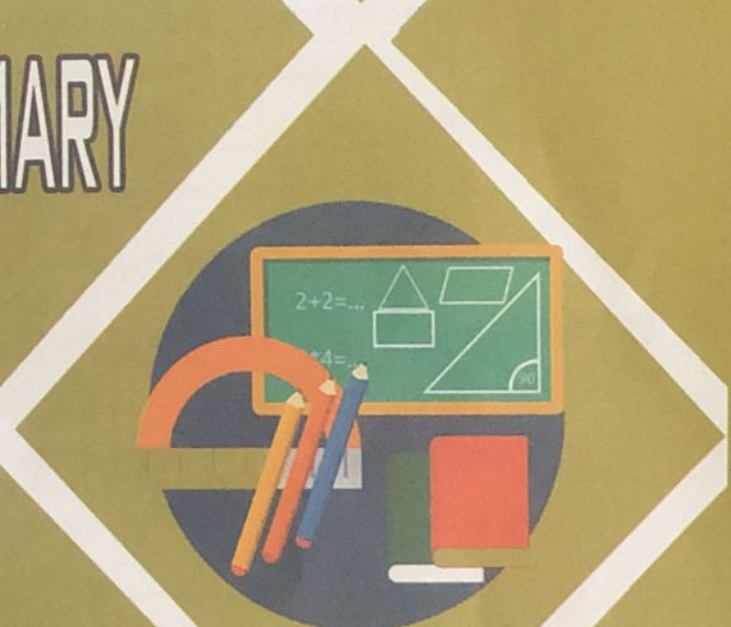
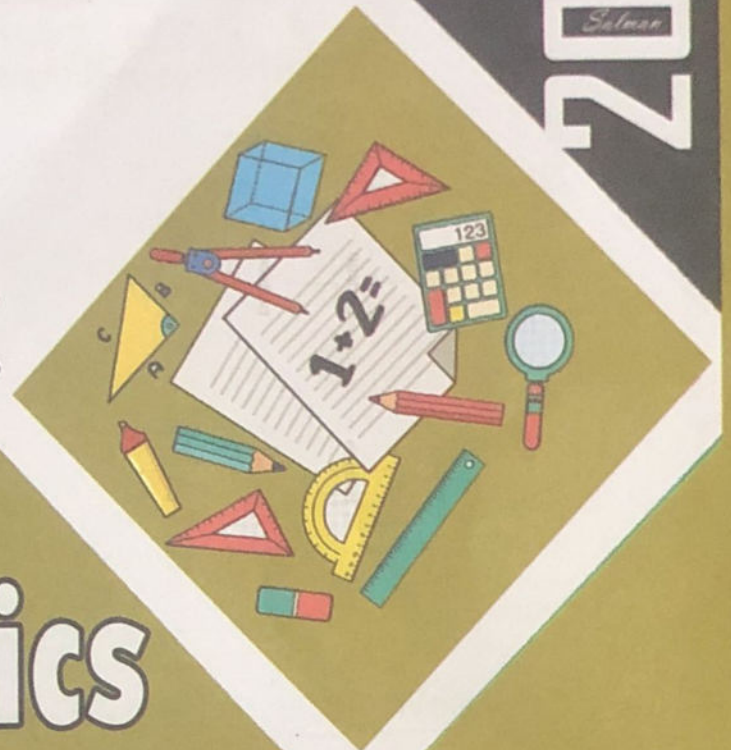
QUESTIONS BANK

Mathematics

SIXTH GRADE PRIMARY

FIRST TERM

FINAL
REVISION



2022
Salman

6

PRIM 6 – MODEL No 1

[1] Choose the correct answer:

(1) If $A : B = 2 : 3$, $A : C = 4 : 5$, then $B : C =$

- a) 6 : 5 b) 5 : 6 c) 3 : 5 d) 5 : 3

(2) 40 % from 80 = 80 % from X, then $X =$

- a) 32 b) 40 c) 12 d) 320

(3) The number of axis of symmetry of the square =

- a) 1 b) 2 c) 3 d) 4

(4) The range of the values 1, 4, 6, 7, 9 =

- a) 10 b) 8 c) 6 d) 5

(5) The following data is quantitative except

- a) Age b) Color c) Length d) Weight

(6) If one of angles of the parallelogram is right and the length of two adjacent sides are equal in length, then it called

- a) Rhombus b) Rectangle c) Square d) Triangle

(7) The next term in the pattern 4, 9, 16, 25, is

- a) 35 b) 36 c) 37 d) 38

(8) $5 \text{ cm}^3 =$ ml

- a) 5 b) 50 c) 0.005 d) 5000

(9) The unit of measuring capacity is

- a) Feddan b) Liter c) Milliliter d) Meter square

(10) $1500 \text{ cm}^3 + 0.5 \text{ dm}^3 =$ liter

- a) 2000 b) 1505 c) 2 d) 3

(11) $12 \% \div 4 \% =$ %

- a) 3 b) 48 c) 300 d) 16

(12) If sum of edges of two adjacent faces is 56 cm, then its volume = cm^3

- a) 343 b) 512 c) 125 d) 434

(13) The dimensions of Cuboid are 2 cm, 5 cm, 8 cm, then its volume = cm^3

- a) 60 b) 65 c) 80 d) 56

(14) A tractor plough 14 feddans in 3.5 hour, then the rate Feddan / hour is ...

- a) $\frac{1}{4}$ b) 4 c) 8 d) 49

[2] Complete each of the following with correct answers:

- 15) If the numbers 9 , x , x , 4 are proportional quantities, then $X = \dots\dots\dots$
- 16) If the ratio between number of boys and number of girls is 50 %, then the ratio between number of girls to number of boys = $\dots\dots\dots$ %
- 17) Data form is $\dots\dots\dots$
- 18) If the buying price for goods is $\frac{4}{5}$ its selling price, then the profit is $\dots\dots\dots$ %
- 19) If the ratio between angle of a triangle is 3 : 7 : 10, then the type of triangle according to its angle is $\dots\dots\dots$
- 20) If the volume of a cube is 125 cm^3 , then the perimeter of one of its faces = $\dots\dots\dots$ cm
- 21) A car covered 360 km in 4 hours, then the speed of the car = $\dots\dots$ km / hour
- 22) $3 \frac{1}{3} \% = \frac{\dots\dots\dots}{\dots\dots\dots}$

[3] Answer the following questions:

- 23) A vessel as a shape of Cuboid the inner dimensions of its base are 20 cm, 15 cm, 12 liter of water poured in it. Find the height of water in the vessel
- 24) Yousif take a photo to an insect with magnification ratio 100 : 1, if the real length of the insect is 0.8 ml. find the length of the insect in the picture.
- 25) Shahd bought a computer with 960 L.E, she paid 20 L.E for transporting and sold it by 1176 L.E. Find the percentage of her profit.
- 26) The table shows the expected degree of Temp. For 30 cities in summer day:

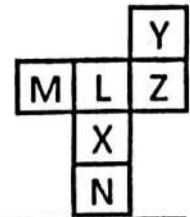
Temp. degrees	24 –	28 –	32 –	36 –	40 –	44 –	Total
No. of cities	3	4	7	9	5	2	30

- a) Draw the frequency curve.
- b) How many cities who their degrees 32 or more?

◆ ◆ ◆
End of the questions

PRIM 6 – MODEL No 2

[1] Choose the correct answer:



- (1) A Piece of paper formed from six equal squares is folded to form a cube. which face is opposite to face X : ☐
- a) M b) L c) Z d) Y
- (2) ABCD is a parallelogram the ratio between angle B , A = 2 : 1 then $m(\angle D) = \dots\dots\dots$
- a) 30 b) 60 c) 120 d) 180
- (3) 37.5 % from Feddan = $\dots\dots\dots$ kirates
- a) 3 b) 6 c) 9 d) 15
- (4) $15\% \div 5\% = \dots\dots\dots$
- a) 30 % b) $\frac{1}{3}$ c) 3 % d) 3
- (5) Number of cubs with edge 2 cm are fill a box as shape of Cuboid with dimensions 2 cm , 4 cm , 6 cm = $\dots\dots\dots$
- a) 4 b) 6 c) 8 d) 9
- (6) Which of the following can be a measure of area for rectangular land?
- a) 12 cm^3 b) 13 m c) 15 liter d) 18 m^2
- (7) $\frac{7}{8}\%$ from 4800 L.E = $\dots\dots\dots$ L.E
- a) 48 b) 42 c) 87 d) 4200
- (8) From descriptive data $\dots\dots\dots$
- a) Shoes color b) Exam mark c) Weight d) fruits price
- (9) $4.3 \div 100\% = \dots\dots\dots$
- a) 4.3 b) 43 % c) 4.3 % d) 43
- (10) A piece of metal in the shape of Cuboid with dimensions 4 , 6 , 9 cm is melted to cube, then the edge of cube = $\dots\dots\dots$ cm
- a) 4 b) 6 c) 9 d) 12
- (11) The ratio of the shaded part = $\dots\dots\dots\%$
-
- a) 25 b) 12.5 c) 62.5 d) 37.5
- (12) The mathematical operation to find the range and length of set is
- a) - b) \times c) + d) \div
- (13) If $\frac{1}{8}$ a number is 28, then $\frac{1}{7}$ this number = $\dots\dots\dots$
- a) 11 b) 32 c) 12 d) 16
- (14) The percentage is a ratio its second term = $\dots\dots\dots$
- a) 1 % b) 100 % c) 1 d) $\frac{200}{2}$

[2] Complete each of the following with correct answers:

- 15) If $\frac{x}{9} = \frac{4}{x} = \frac{x+y}{12}$, then $x = \dots\dots\dots$, $y = \dots\dots\dots$
- 16) If the real length 1.6 m and the length in drawing 2.5 cm, then the drawing scale = $\dots\dots\dots$
- 17) $\frac{3}{4} \times 0.8 \times 62.5\% \times 2\frac{2}{3} = \dots\dots\dots\%$
- 18) If $\frac{1}{3}X - 7 = 5$, then $X = \dots\dots\dots$
- 19) If $\frac{7}{8} : \frac{7}{16} = \frac{X}{0.2}$, then $X = \dots\dots\dots$
- 20) The ratio is $\dots\dots\dots$
- 21) The volume of cube whose sum of its edges 96 cm = $\dots\dots\dots$
- 22) Number of sets = Range $\times \dots\dots\dots$

[3] Answer the following questions:

23) Draw the frequency curve of the following table:

Student degree	40 –	45 –	50 –	55 –
No. of student	3	4	7	9

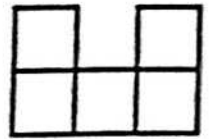
- 24) A vessel has $2\frac{1}{2}$ liter of milk, wants to be filled in some bottles with capacity 125 cm^3 , find the number of bottles?
- 25) A Cuboid with dimensions 90 cm, 20 cm, 5 cm is melted to two cubes the edge of the first is twice the second. Find the length of each edge?
- 26) The sum of perimeters of a Cuboid is 320 cm^2 , the ratio between its dimensions 2 : 3 : 5. Find its volume? (Excellent pupils, answer 1920)

*** End of the questions ***

PRIM 6 – MODEL No

3

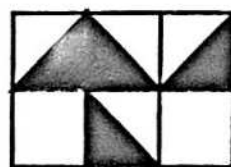
[1] Choose the correct answer:



- (1) The opposite figure formed from five equal squares, if the area of the figure 80 cm^2 , then the side length of the square = cm
 a) 2 b) 3 c) 4 d) 5
- (2) $1\% \times 4\% = \dots\dots\dots \%$
 a) 4% b) 0.004 c) 0.04 d) 41%
- (3) Form quantitative data
 a) Birth place b) Education c) Shoes size d) Favorite food
- (4) If $\bigcirc + \bigcirc + \square = 2\frac{3}{4}$, $\square \bigcirc 1.5$, then $\square \dots\dots\dots$ decimal form
 a) 0.2 b) 0.5 c) 0.1 d) 0.25
- (5) If the thickness of paper 0.012 cm, then the height packet of paper formed from 400 papers = Cm
 a) 0.048 b) 0.48 c) 4.8 d) 48
- (6) $4 : 625 = \dots\dots\dots \%$
 a) 0.0064 b) 0.064 c) 0.64 d) 6.4
- (7) To find the smallest value from some of values by using the range and the greatest value we use the operation
 a) \times b) \div c) $+$ d) $-$
- (8) The difference between 40%, 0.4 =
 a) 36% b) Zero c) 26% d) 36
- (9) The number of bottles with capacity 75 cm^3 and wants to be filled with 60 liter of water =
 a) 8 b) 80 c) 800 d) 8000
- (10) If the real length 30 m, the length in drawing 3 cm, the drawing scale =
 a) 100 : 1 b) 1 : 1000 c) 1 : 10 d) 1000 : 1
- (11) The percentage of lose = $(\frac{\text{lose}}{\dots\dots\dots} \times 100) \%$
 a) profit b) Selling price c) Cost price d) lose
- (12) The volume of cube 0.216 liter, then it edge length = cm
 a) 0.6 b) 0.06 c) 6 d) 60
- (13) The price of a book 12 L.E and has a discount 12%, then it price before discount = L.E
 a) 18 b) 3 c) 15 d) 21
- (14) The volume of a cube with edge 0.1 cm = Cm^3
 a) 0.111 b) 0.1 c) 0.001 d) 0.010

[2] Complete each of the following with correct answers:

- 15) An amount of money is distributed between Mohamed and Eslam, Eslam take 60 % of money, then the ratio of distribution = :
- 16) The ratio of the shaded parts to the area of the figure = %
- 17) ABCD is a parallelogram, $m(\angle A) = 40^\circ$
 , the ratio between $(\angle D)$, $(\angle C)$
 = : In the simplest form
- 18) The perimeter of rectangle $\frac{1}{4}$ m , and its length $\frac{1}{2}$ dm, then $L = \frac{\dots}{\dots} W$
- 19) The drawing scale is
- 20) If X % from 200 = 24, then X =
- 21) If $(20 - Y) = 4$, then Y =
- 22) The owner of a library sold 25 % of pens and kept 60 pens, then the number of total pens = pen

**[3] Answer the following questions:**

- 23) Draw the frequency curve of the following table:

Weekly wages	50 –	60 –	70 –	80 –
No. of workers	4	13	6	3

- 24) If five times a number is 45, find $33\frac{1}{3}\%$ from this number?
- 25) If the ratio between Zeyad length: Hana length is 9 : 7, and the difference between their lengths = 12 cm. find the length of Zeyad and Hana.
- 26) The sum of dimensions of a Cuboid 24 cm, find the sum of perimeter of its faces. (Excellent pupils, answer 192)

PRIM 6 – MODEL No 4

[1] Choose the correct answer:

(1) $0.5 : 0.05 = \dots : \dots$

- a) 1 : 2 b) 50 : 1 c) 10 : 1 d) 1 : 10

(2) The ratio which represents a drawing scale is

- a) 4 : 7 b) 6 : 125 c) 50 : 1 d) 3 : 100

(3) If 45 is the greatest value for group of values its range 18, then the smallest value in this group =

- a) 63 b) 27 c) 17 d) 72

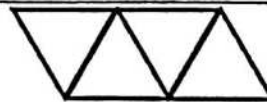
(4) $66\frac{2}{3} \% \times 1\frac{1}{2} = \dots \%$

- a) 1 b) 10 c) 100 d) Zero

(5) If 40 % from X = 20 % from 800, then X =

- a) 600 b) 160 c) 400 d) 200

(6) The number of parallelograms in the opposite figure =



- a) 3 b) 4 c) 5 d) 6

(7) The cubic decimeter is a volume of cube with edge length = Cm

- a) 1 b) 10 c) 100 d) 1000

(8) If the ratio between measure of angles of triangle is 2 : 5 : 3 , then the type of triangle according to its angles

- a) acute b) Right c) Obtuse d) Straight

(9) The volume of a Cuboid 105 cm^3 , the area of its base 35 cm^2 , then its height = cm

- a) 2 b) 3 c) 4 d) 5

(10) $3\frac{1}{4}$ Liter = dm^3

- a) $\frac{13}{4}$ b) 3.5 c) 30 d) 20

(11) If the area of one face of a cube = 4 cm^2 , then its volume = cm^3

- a) 6 b) 8 c) 24 d) 64

(12) The ratio between the radius and the circumference of circle = 7 :

- a) 22 b) 88 c) 44 d) 21

(13) The parallelogram with right angle is

- a) Rectangle b) Rhombus c) Triangle d) Trapezium

(14) The minimum number of terms for the proportion is.....

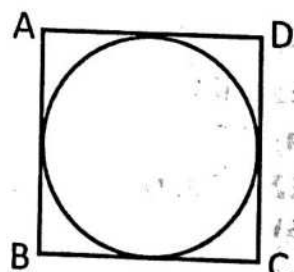
- a) 2 b) 4 c) 6 d) 8

[2] Complete each of the following with correct answers:

- 15) Two number one of them is twice the other, if the greatest one is X , then the smallest one is
- 16) If the number $1, \frac{1}{3}, 9, X$ are proportional, then $X = \dots\dots\dots$
- 17) If $X\%$ from $Y = Y$, then $X = \dots\dots\dots$
- 18) The ratio between two sides of a square = :
- 19) ABCD is a parallelogram, the ratio between $\angle A : \angle C = \dots\dots : \dots\dots$
- 20) $(30\% \div 3\%) + (12.5\% \times 8) = \dots\dots\dots$
- 21) Number to its half to its double = : :
- 22) If $X = 4Y$, then $Y = \dots\dots X$

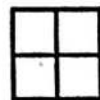
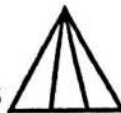
[3] Answer the following questions:

- 23) A man died and left a wife, two boys and three girls. If the share of the girls 7500 L.E . Find the value of the legacy and the share of wife and the boy. Knowing that the share of wife is $\frac{1}{8}$ the legacy and the share of boy twice the share of girl.
- 24) Amount of money 5500 is distributed between three persons, the first take $\frac{3}{5}$ the second, the second take $\frac{4}{7}$ first and third, find the share of each one.
- 25) ABCD is a square with side 7 cm, find the ratio between the perimeter of square and the circumference of circle
- 26) A Cuboid with square base, its height 5 cm and the difference between sum of its edges and dimensions 51 cm, find its volume



PRIM 6 – MODEL No 5

[1] Choose the correct answer:



(1) The ratio between numbers of triangles and numbers of squares

- a) 2 : 5 b) 7 : 3 c) 6 : 5 d) 3 : 7

(2) The drawing scale 1 : 1000000 means that each 1 cm in drawing represents Km in reality .

- a) 1 b) 10 c) 100 d) 1000

(3) The ratio 7 : 4 is less than

- a) 3 : 2 b) 5 : 4 c) 14 : 9 d) 9 : 4

(4) The diagonals are equal in length in square and

- a) Rhombus b) Parallelogram c) Rectangle d) Trapezium

(5) If the area of one face of the cube 4 cm^2 , then its volume = cm^3

- a) 6 b) 8 c) 24 d) 64

(6) A runner covered 15 % of the race in 3 minutes, how many minutes he need to complete the race?

- a) 10 b) 15 c) 17 d) 20

(7) If 3 , X - 14 , 8 are proportional quantities, then X =

- a) 5 b) 7 c) 8 d) 9

(8) $1 - \frac{\text{.....}}{\text{.....}} = 33 \frac{1}{3} \% \square$

- a) $\frac{1}{4}$ b) $\frac{1}{3}$ c) $\frac{2}{3}$ d) $\frac{3}{4}$

(9) In a rectangle, the width = $\frac{2}{3}$ length, then width: perimeter = :

- a) 1 : 5 b) 2 : 3 c) 3 : 2 d) 3 : 10

(10) $\frac{2}{3} \times 0.4 \times 37.5 \% \times 10 = \text{.....} \%$

- a) 1 b) 10 c) 2 d) $\frac{1}{100}$

(11) The following data are quantitative except

- a) Age b) Length c) Birth place d) weight

(12) If the angle between two diagonals in a parallelogram is right, then it will be..

- a) Rectangle b) Square c) Rhombus d) Trapezium

(13) $\frac{4}{5} \div \frac{4}{5} = \frac{4}{5} \times \text{.....}$

- a) 1.25 b) 0.8 c) 0.6 d) $\frac{4}{5}$

(14) $16 \frac{2}{3} \% = 1 : \text{.....}$

- a) 1 b) 3 c) 5 d) 6

[2] Complete each of the following with correct answers:

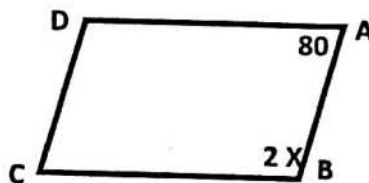
- 15) If $\frac{1}{2}$ what Ahmed has: $\frac{3}{4}$ what Amir has, the ratio between Ahmed : Amir = :
- 16) 25 % from 80 = 80 % from
- 17) The compare between two different kinds is called
- 18) If $\frac{3}{5}$ diameter of circle = 6 cm, then the length of radius = cm
- 19) If $A : B = 25 \%$, $b : A = \dots\dots\dots \%$
- 20) Drawing scale = length in draw \times
- 21) Number of sets = range \times
- 22) $\frac{2}{5} \% = 1 : \dots\dots\dots$

[3] Answer the following questions:

- 23) In occasion, the value of discount is 20 %, if another discounted 5% is added to the rest form the first discount, find the value of total discount?
- 24) A Cuboid sum of its dimensions 100 cm, the ratio between dimension of its base 5 : 3, if the height 2 dm, find its volume?

- 25) In the opposite figure:

Find the value of X, find $m(\angle D)$



- 26) The table shows the marks of 100 pupils in math exam :

Marks	20 –	30 –	40 –	50 –	Total
No. of pupils	15	30	40	15	100

- 1) Draw the frequency curve.
- 2) How many pupils have less than 40 degree?

PRIM 6 – MODEL No 6

[1] Choose the correct answer:

(1) 18 hours : one day = :

- a) 4 : 3 b) 3 : 4 c) 2 : 3 d) 1 : 6

(2) The side length of square 3 cm, then the ratio between its side to perimeter = :

- a) 1 : 4 b) 4 : 1 c) 1 : 3 d) 3 : 1

(3) If $A = \frac{1}{2} B$, $B = \frac{1}{3} C$, $A : C = \dots\dots\dots$

- a) 1 : 3 b) 3 : 1 c) 1 : 6 d) 6 : 1

(4) 300 gm : $1\frac{1}{2}$ Kg = :

- a) 1 : 2 b) 1 : 5 c) 1 : 10 d) 1 : 3

(5) If $\frac{14}{x} = 0.7$, then $x = \dots\dots\dots$

- a) 0.2 b) 0.7 c) 20 d) 70

(6) 20 % from 200 L.E = L. E

- a) 60 b) 10 c) 40 d) 30

(7) If the percentage of boys in a school 60 %, if 75 % from them prefer football, then its percentage to the total students in school =

- a) 30 % b) 40 % c) 45 % d) 50 %

(8) In any proportion, the product of means the product of extremes

- a) > b) = c) < d) ≤

(9) If one angle in the parallelogram is right, then it called

- a) Square b) Trapezium c) Rectangle d) Rhombus

(10) The sum of two consecutive angles in the rhombus = °

- a) 360 b) 180 c) 90 d) 60

(11) Sum of dimensions of a Cuboid 6 cm, then sum of its edges = Cm

- a) 18 b) 24 c) 20 d) 30

(12) If the sum of edges of cube is 36 cm. then its volume = cm

- a) 81 b) 27 c) 9 d) 15

(13) The following data are quantitative except

- a) age b) No. of sons c) Weight d) Blood type

(14) 572.4 cm ≈ (nearest meter)

- a) 572 b) 570 c) 6 d) 600

[2] Complete each of the following with correct answers:

- 15) The ratio between two sides in the equilateral triangle = :
- 16) Is the ratio between two different quantities
- 17) A tractor plough 12 feddans in 3 hours, then the rate of its performance = feddans / hours
- 18) $\frac{2}{3} = \frac{4}{6} = \frac{8}{12}$ is called
- 19) If the drawing scale < 1 , then it means
- 20) The range (3 , 9 , 5 , 8 , 2) is

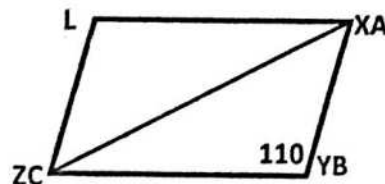
[3] Answer the following questions:

- 21) If the ratio between the two acute angle in the right angle triangle is 7 : 11, find the measure of each angle?
- 22) If the ratio between ages of Basma, Hana and Sheren is 2 : 3 : 5, the difference between age of Hana and Sheren is 4 years. Find the age of each of them?
- 23) A vessel in the form of cube its inner edge is 20 cm is filled by honey. If the price of one liter of honey is 40 pounds, find the price of honey?
- 24) A map is drawn by drawing scale 1 : 100000, if the distance between two cities on the map is 5 cm, find the real distance between them in KM?
- 25) In the opposite figure:

ABCD is a parallelogram, $m(\angle Y) = 120^\circ$,

$m(\angle YXZ) = 35^\circ$

Find: $m(\angle L)$, $m(\angle LXZ)$



- 26) The table shows the marks of 40 pupils in math exam :

Marks	10 –	20 –	30 –	40 –	50 – 60	Total
No. of pupils	4	8	12	10	6	40

↪ Draw the frequency curve.

PRIM 6 – MODEL No 7

[1] Choose the correct answer:

(1) $5 \text{ cm}^3 = \dots\dots\dots \text{ ml}$

- a) 5000 b) 0.005 c) 5 d) 50

(2) The following data are quantitative except

- a) Age b) Color c) Length d) Weight

(3) Volume of Cuboid 72 cm^3 , area of its base 24 cm^2 , then its height = Cm

- a) 6 b) 3 c) 4 d) 7

(4) If $A : B = 25 \%$, then $b : A = \dots\dots \%$

- a) 200 b) 400 c) 50 d) 25

(5) A perimeter of base of a cube is 8 cm, then its volume = dm^3

- a) 8 b) 64 c) 0.008 d) 0.064

(6) If $\frac{x}{8} = 37.5 \%$, then $x = \dots\dots\dots$

- a) 37.5 b) 8 c) 100 d) 3

(7) If the angle between the diagonal of the parallelogram is right, then it will be

- a) Rectangle b) Square c) Rhombus d) Trapezium

(8) $\frac{4}{5} \div \frac{4}{5} = \frac{4}{5} \times \dots\dots\dots$

- a) 1.25 b) 0.8 c) 0.6 d) $\frac{4}{5}$

(9) The range for the values 1, 4, 6, 7, 9 =

- a) 10 b) 5 c) 8 d) 6

(10) If $\frac{x}{21} = \frac{2}{7}$, then $x = \dots\dots\dots$

- a) 6 b) 21 c) 12 d) 7

(11) In a cube, sum of five edges is 20 cm, then its volume = cm^3

- a) 8 b) 128 c) 4 d) 64

(12) $\frac{3}{4} \text{ dm}^3 = \dots\dots\dots \text{ liter}$

- a) 75 b) 750 c) 75 % d) 57

(13) The number Not prime number

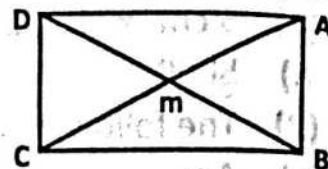
- a) 2 b) 5 c) 7 d) 9

(14) $1 - (25\% + \frac{1}{2}) = \dots\dots\dots$

- a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) $\frac{1}{5}$

[2] Complete each of the following with correct answers:

- 15) If $L : M = 2 : 3$, then $3L = \dots\dots\dots$
- 16) A box of wood as a shape of cube its volume 1000 cm^3 and its capacity 729 cm^3 , then the volume of wood = $\dots\dots\dots \text{ cm}^3$
- 17) If ABCD is a rectangle, $AM = BD = \dots\dots : \dots\dots$
- 18) $\dots\dots\dots$ is data written as numbers
- 19) Square its diagonal 8 cm, its area = $\dots\dots\dots$
- 20) The cube is $\dots\dots\dots$
- 21) Number of sets = the range $\div \dots\dots\dots$
- 22) If $A : B = 2 : 3$, $B : C = 6 : 7$, then $A : C = \dots\dots\dots : \dots\dots\dots$



[3] Answer the following questions:

- 23) A vessel as a shape of cube its inner edge is 30 cm, some of water is poured in it which filled two thirds of it, find the volume of the empty part in liters
- 24) A map of Suez canal is drawing by scale $1 : 400000$. If the real length of canal is 72 km, find the length of canal in the map.
- 25) Find the selling price for some of electronics equipment which bought with 72000 L.E and the percentage of profit 12 %.
- 26) The table shows the marks of 40 pupils in math exam :

Marks	10 –	20 –	30 –	40 –	50 –	Total
No. of pupils	10	15	30	25	20	100

Draw the frequency curve.

*** End of the questions ***

PRIM 6 – MODEL No 8

[1] Choose the correct answer:

- (1) The ratio between the perimeter of equilateral triangle and its side = ...
a) 1 : 3 b) 3 : 2 c) 2 : 3 d) 3 : 1
- (2) The difference between 30 % and 0.3 is
a) 0.27 b) 0.17 c) Zero d) 0.33
- (3) A rectangle its length is twice its width, then the ratio between its width and perimeter =
a) 1 : 6 b) 1 : 3 c) 1 : 2 d) 2 : 1
- (4) The volume in the inner space of any solid is called
a) Volume b) Area c) Perimeter d) Capacity
- (5) If 10 % of amount of money is 50 L . E , then the total money is
a) 5000 b) 5 c) 1000 d) 500
- (6) The area of base of a cube whose volume $216 \text{ cm}^3 = \dots\dots\dots \text{ cm}^2$
a) 6 b) 12 c) 36 d) 24
- (7) If 1000 pounds is distribute between Shahd and Yousif , if the share of Yousif is 400 L.E, then the ratio of distribution is
a) 3 : 2 b) 2 : 3 c) 1 : 4 d) 6 : 4
- (8) The common factor for all numbers is
a) 0 b) 1 c) 2 d) 3
- (9) A prime number sum of its factors is 12 , this number is
a) 7 b) 9 c) 11 d) 13
- (10) A Cuboid its volume 320 cm^3 , its base area is 80 cm, then its height=...cm
a) 32 b) 8 c) 4 d) 16
- (11) ABCD is a parallelogram, $m(\angle A) + m(\angle C) = 160^\circ$, then $m(\angle B) = \dots^\circ$
a) 20 b) 100 c) 60 d) 80
- (12) The measure of angle between the diagonal and the side of the square is
a) 30° b) 45° c) 60° d) 90°
- (13) The number of possible rectangles is

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a) 2 b) 3 c) 4 d) 6
- (14) $150 \text{ cm} : 3 \text{ m} = \dots\dots\dots : \dots\dots\dots$
a) 1 : 2 b) 1 : 3 c) 1 : 5 d) 1 : 7

[2] Complete each of the following with correct answers:

- 15) If 5, 7, 20, X are proportional numbers, then $X = \dots\dots\dots$
- 16) 30 % from 600 = 15 % from $\dots\dots\dots$
- 17) A rhombus with equal diagonals is $\dots\dots\dots$
- 18) $500 \text{ cm}^3 = \dots\dots \text{ ml}$
- 19) The center of set (8 – 14) is $\dots\dots\dots$
- 20) The volume of cube whose perimeter of its base 28 cm = $\dots\dots\dots$
- 21) $\frac{x}{4} = 20 \%$ then $X = \dots\dots\dots$
- 22) Drawing scale = length in draw $\times \dots\dots\dots$

[3] Answer the following questions:

- 23) The perimeter of a rectangle is 48 cm, the ratio between its dimensions is 5 : 3, find its area?
- 24) Zeyad bought a refrigerator with 7200 L.E, if he wants to sell it with profit 12.5 %. Find the selling price
- 25) A tin as a shape of Cuboid its dimensions 15 cm, 24cm, 3 dm is filled by honey the price of one liter is 25 L.E. find the price of total honey?
- 26) The table shows the expected degree of Temp. For 30 cities in summer day:

Temp. degrees	24 –	28 –	32 –	36 –	40 –	44 –	Total
No. of cities	3	4	7	9	5	2	30

c) Draw the frequency curve.

d) How many cities who their degrees 32 or more?

*** End of the questions ***

PRIM 6 – MODEL No 9

[1] Choose the correct answer:

(1) $20\% + 50\% = \dots\dots\dots$

- a) 30 b) 0.7 c) 70 d) 7

(2) If $A : B = 3 : 4$, $B : C = 4 : 7$, then $A : C = \dots\dots\dots$

- a) $7 : 4$ b) $6 : 7$ c) $3 : 7$ d) $4 : 3$

(3) If the diagonals of the quadrilateral are equal in length and not perpendicular, then the figure is $\dots\dots\dots$

- a) Parallelogram b) Rectangle c) Rhombus d) square

(4) If the numbers $X, 2, 6, 3$ are proportional, then $X = \dots\dots\dots$

- a) 4 b) 12 c) 15 d) 6

(5) $0.25 + \frac{3}{4} = \dots\dots\dots$

- a) 1 b) 2 c) 3 d) 4

(6) The length of a tree is 6 m, and its length in the drawing 3 cm, then the drawing scale is $\dots\dots\dots$

- a) $1 : 100$ b) $1 : 200$ c) $1 : 300$ d) $1 : 600$

(7) Number of edges of the Cuboid = $\dots\dots\dots$

- a) 8 b) 12 c) 6 d) 4

(8) $7 \text{ cm}^3 = \dots\dots\dots \text{ ml}$

- a) 0.07 b) 0.07 c) 0.7 d) 7

(9) A car covered 240 km in 3 hours, then its speed = $\dots\dots$ Km / hour

- a) 720 b) 72 c) 43 d) 80

(10) The volume of cube whose base area is $16 \text{ cm}^2 = \dots\dots\dots$

- a) 16 b) 64 c) 46 d) 32

(11) The following data are descriptive except $\dots\dots\dots$

- a) Birth place b) Age c) Favorite color d) Blood type

(12) If the area of rectangle 40 cm^2 , its length 8 cm, then the ratio between length and width = $\dots\dots\dots : \dots\dots\dots$

- a) $5 : 8$ b) $8 : 5$ c) $1 : 5$ d) $1 : 5$

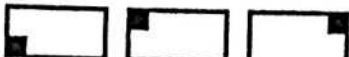
(13) If the cost price of a refrigerator 2000 pounds and its selling price is 2500 pounds, then the percentage of profit = $\dots\dots\%$

- a) 10 b) 15 c) 20 d) 25

(14) Salah spent 30 % of 450 L.E, the Salah spent $\dots\dots$ pounds

- a) 125 b) 135 c) 145 d) 150

[2] Complete each of the following with correct answers:

- 15) $\frac{27}{90} = \dots\dots\dots \%$
- 16) If (X , 18 , 6 , 9) are proportional numbers, then X =
- 17) The number of faces of a Cuboid =
- 18) The cube is a Cuboid its dimensions
- 19) If the drawing scale 1 : 200 , if the length in draw is 25 cm, the the real length = m
- 20) The ratio between the side length of equilateral triangle and its side = : ..
- 21) Third hour : 15 minutes = :
- 22) The next shape in the pattern  Is

[3] Answer the following questions:

- 23) If the drawing scale is 1 : 1000 , the length in draw 0.75 cm, find the real length in meter.
- 24) A merchant sold goods with 700 L.E with profit 10 %. Find the cost price
- 25) A Cuboid its height 15 cm and perimeter of its base is 96 cm, its width 40 cm. find its volume
- 26) Adel , Salah and Maged are setup a company, Adel paid 2000 LE, Salah paid 1600 LE and Maged paid 14000 LE, at the end of the year the profit is 15000LE. Find the share of each of them.
- =====

★ ★ End of the questions ★ ★

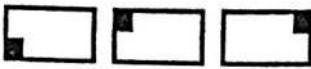
PRIM 6 – MODEL No

10

[1] Choose the correct answer:

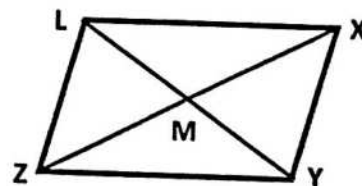
- (1) $2.5 : 1.5 = \dots\dots\dots$
 a) 2 : 3 b) 3 : 2 c) 3 : 4 d) 4 : 3
- (2) If X half Y, Y twice Z, then $X : Y = \dots\dots\dots : \dots\dots\dots$
 a) 1 : 4 b) 4 : 1 c) 1 : 3 d) 3 : 1
- (3) Two diagonals are equal and not perpendicular in
 a) Rectangle b) Rhombus c) Parallelogram d) Square
- (4) If X, 4, 16, X are proportional numbers, then $X = \dots\dots\dots$
 a) 4 b) 8 c) 12 d) 16
- (5) If the center of the set is 7, its end is 9, then the length of it =
 a) 4 b) 5 c) 6 d) 2
- (6) The following data are quantitative except
 a) Age b) Length c) Birth place d) Birth day
- (7) Drawing scale is
 a) Rate b) Ratio c) Proportion d) Other wise
- (8) A triangle the ratio between its angles 8 : 3 : 5, is Triangle.
 a) Acute b) Right c) Obtuse d) Straight
- (9) $355 \div 188 = 0.355 \div \dots\dots\dots$
 a) 18 b) 1.8 c) 0.18 d) 0.018
- (10) The volume of cube is 0.343 m^3 , then its edge = dm
 a) 0.007 b) 0.07 c) 7 d) 0.7
- (11) Two number, the difference between them is 20, one of them is X, then the other number =
 a) $20 + X$ b) $20 - X$ c) $X - 20$ d) $2 \times X$
- (12) $1.45 \text{ liter} + 0.5 \text{ dm}^3 + 50 \text{ cm}^2 = \dots\dots\dots \text{ liter}$
 a) 3 b) 2.5 c) 2 d) 1.95
- (13) If the length of the radius is increase by 5 %, the its circumference is increase by %
 a) 2.5 b) 5 c) 7.5 d) 10
- (14) Two circles their diameter 6 cm, 10 cm. then the ratio between their circumference =
 a) 2 : 3 b) 3 : 10 c) 3 : 5 d) 6 : 5

[2] Complete each of the following with correct answers:

- 15) Mahmoud bought a computer with 10 % discount from its price 2600, then Mahmoud paid = LE
- 16) The next shape in the pattern  is
- 17) A tractor plough 10 feddans in 4 hours , then the rate of the work of tractor is
- 18) $1 - (37\% + 0.41) = \dots\dots\dots$ (decimal form)
- 19) $4.5 \text{ m} : 35 \text{ dm} : 250 \text{ cm} = \dots\dots\dots : \dots\dots\dots : \dots\dots\dots$
- 20) Numbers of the rectangle =

[3] Answer the following questions:

- 21) The ratio between two dimensions of a rectangle is 4 : 3 , and its perimeter 70 cm, find its area .
- 22) A man distribute 8000 LE between his three sons, the first one take 37.5 % and the rest is distributed between second and third by ratio 4 : 3 . find the share of each one?
- 23) A merchant found that if he sells a bicycle with 1800 LE. His lose is 20 % . Find the price in which the bicycle is sold with profit 15 % .
- 24) Two maps are drawn, the first map is drawn with scale 1 : 20000 and the second map is drawn with scale 1 : 500000. If the distance between two cities on the first map 40 cm. find the distance between them on the second map
- 25) XYZL is a parallelogram its diagonal intersect at M, $XY = 6 \text{ cm}$, $XZ = 16.8 \text{ cm}$, $MX = 5.6 \text{ cm}$, $m(\angle XYL) = 70^\circ$, Find : ① Perimeter of triangle LMZ
② $m(\angle LYZ)$
- 26) The table shows the marks of 50 pupils in math exam :



Marks	10 –	20 –	X –	40 – 50	Total
No. of pupils	5	15	20	Y	50

① Find the value of X , Y

② Draw the frequency curve.

PRIM 6 – MODEL No

11

[1] Choose the correct answer:

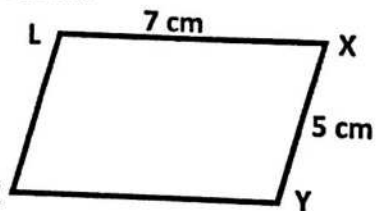
- (1) If Hazem drink 21 cups of milk weekly, then the rate of his drinking in one day is
- a) 3 cups b) 7 cups c) 14 cups d) 20 cups
- (2) If the ratio between angles of a triangle $1 : 2 : 3$, then the measure of first angle =
- a) 10° b) 30° c) 45° d) 60°
- (3) If $A : B = 5 : 8$, and $B - A = 9$, then $A =$
- a) 10 b) 20 c) 15 d) 25
- (4) A merchant sold his goods with profit 15 %, then the percentage for selling price to cost price = %
- a) 15 b) 85 c) 115 d) 150
- (5) Length of the set in the frequency distribution (5- , 9- , 13- ,) is
- a) 4 b) 5 c) 6 d) 10
- (6) $2\frac{1}{4} : 1\frac{1}{4} =$
- a) 5 : 9 b) 9 : 5 c) 4 : 5 d) 5 : 4
- (7) 5 { 3 , 5 }
- a) \in b) \notin c) \subset d) $\not\subset$
- (8) Two number X , Y their sum is 20, then $Y =$
- a) $20 + Y$ b) $20 - Y$ c) $X - 20$ d) $20 - X$
- (9) 25 % from 1000 = 50 % from
- a) 20000 b) 15000 c) 1250 d) 500
- (10) 75 % from liter + 25 % from $\text{dm}^3 =$
- a) 10 Liters b) 1000 cm^3 c) 100 dm^3 d) 100 cm^3
- (11) The cubic centimeter is a unit of measuring
- a) Perimeter b) Area c) Volume d) length
- (12) If the length in draw is 2 cm , the real length is 20 m , then the drawn scale is
- a) 1 : 10000 b) 1 : 100 c) 1 : 1000 d) 1 : 10
- (13) $0.03 >$
- a) 0.2 b) 0.009 c) 0.1 d) 0.11
- (14) Basem turn around a playground 4 rounds in the same time Sameh turns 3 rounds, if Sameh finished 12 rounds, then Basem had finished rounds
- a) 9 b) 11 c) 13 d) 16

[2] Complete each of the following with correct answers:

- 15) $8.765 \times \dots = 876.5$
- 16) There are two types of data,
- 17) The ratio between two sides in the square = :
- 18) If the start of a set 10 and its end 20, then its center =
- 19) A Cuboid its volume 400 cm^3 , length 8 cm, width 5 cm, then height =
- 20) A square with diagonal length 10 cm, then its area = cm^2

[3] Answer the following questions:

- 21) If the percentage of successful in a school is 85 % and the number of pupils is 800, if the ratio from successful pupils between boys and girls 2 : 3. Find the number of successful girls.
- 22) Mai bought a refrigerator in the occasion with 2700 LE after she had discount 10 % . Find the price of refrigerator before discount?
- 23) The height of a building 12 m and the length of its shadow at a moment 4 m, find the height of a tree behind the building if the length of its shadow at same moment is 2 m.
- 24) A vessel is filled with 12 liters of honey wants to be refilled in small bottles with capacity 400 cm^3 . Find the number of bottle is needed?
- 25) In the opposite figure:
XYZL is a parallelogram, $m(\angle Y) = 120^\circ$ find:
① $m(\angle L)$ ② perimeter of a parallelogram
- 27) The table shows the marks of 100 pupils in math exam :



Marks	20 –	30 –	40 –	50 – 60	Total
No. of pupils	10	30	40	20	100

↪ Draw the frequency curve.

*** End of the questions ***

PRIM 6 – MODEL NO

12

[1] Choose the correct answer:

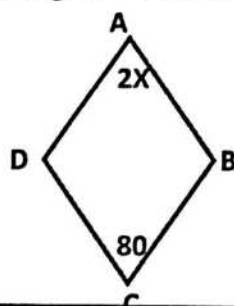
- (1) A runner covered 15 % of a race in 3 minutes, if he continue with same rate, then the time expected to finish the race is minutes
 a) 10 b) 15 c) 18 d) 20
- (2) The range for the values (7 , 3 , 6 , 9 , 5) is
 a) 3 b) 4 c) 6 d) 12
- (3) Two perpendicular lines make 4 angles
 a) Acute b) Right c) Obtuse d) Straight
- (4) The number of axis of symmetry of the rhombus =
 a) 0 b) 1 c) 2 d) 4
- (5) The volume of a cube whose perimeter of its base 36 cm is cm^3
 a) 36 b) 6 c) 729 d) 216
- (6) The length of a tree is 6 m , and its length in draw is 3 cm, then the drawing scale is
 a) 1 : 100 b) 1 : 200 c) 1 : 300 d) 1 : 600
- (7) From quantitative data
 a) Favorite color b) Favorite food c) Age d) Mutual statue
- (8) $2.8 \text{ dm}^3 = \dots\dots\dots$ liter
 a) 2.8 b) 28 c) 2800 d) 28000
- (9) $\{3, 5\} \cap \{4, 5\} = \dots\dots\dots$
 a) $\{3\}$ b) $\{5\}$ c) $\{4\}$ d) $\{3, 4, 5\}$
- (10) If the ratio 7 : 13 is equal to the ratio X : 52, then X =
 a) 14 b) 21 c) 28 d) 35
- (11) 27 months : 3 years = in simplest form
 a) 9 : 1 b) 9 : 10 c) 3 : 4 d) 27 : 30
- (12) Sum of two consecutive angle of a parallelogram = $^\circ$
 a) 360 b) 180 c) 150 d) 280
- (13) The volume of Cuboid 400 cm^3 , its base area 40 cm^2 , then its height = ...
 a) 13 cm b) 20 cm c) 40 cm d) 10 cm
- (14) Number of bottles with capacity 750 ml wants to be filled with 300 liters of water = bottles
 a) 4 b) 40 c) 400 d) 4000

[2] Complete each of the following with correct answers:

- 15) The smallest natural number is
- 16) In the cube, each two faces intersecting together in a line segment called
- 17) Three tenths a number = %
- 18) If $A : B = 3 : 5$, $B : C = 5 : 7$, then $A : C = \dots : \dots$
- 19) If the drawing scale > 1 is represents
- 20) The difference between greatest value and the smallest value for a set of values is called

[3] Answer the following questions:

- 21) A library owner sold 25 % of notebooks and left 60 notebooks. How many notebooks did he have?
- 22) Heba bought a Vacuum Cleaner with 425 L.E, it has a 15 % discount. find the original price of Vacuum Cleaner before discount
- 23) ABC is a right angle triangle at B, if the ratio between angles A , C is 2 : 3. Find the measure of each one
- 24) A Cuboid with square base its perimeter 20 cm and its height 7 cm. find its volume?
- 25) In the opposite figure:
ABCD is a rhombus, $m(\angle C) = 80^\circ$ find:
① Value of X, Y ② perimeter of rhombus
- 26) The table shows the marks of 60 pupils in math exam :



Marks	10 –	20 –	X –	40 –	Total
No. of pupils	10	15	25	10	60

- ① Find the value of X ② Draw the frequency curve.

*** End of the questions ***

PRIM 6 – MODEL No

13

[1] Choose the correct answer:

(1) $\frac{3}{4} = \dots\dots\%$

- a) 42 b) 70 c) 25 d) 75

(2) If the volume of a cube is 125 cm^3 , then edge length = $\dots\dots\text{ cm}$

- a) 25 b) 12 c) 5 d) 15

(3) If $\frac{2}{3}$ from Ahmed has equal $\frac{3}{4}$ from Hatem has, then the ratio between Ahmed and Hatem $\dots\dots$

- a) 2 : 3 b) 3 : 4 c) 8 : 9 d) 9 : 8

(4) All the data are descriptive except $\dots\dots$

- a) food b) place of birth c) length d) type

(5) 30% of a number = $\dots\dots$

- a) $\frac{1}{3}$ b) $\frac{3}{10}$ c) $\frac{3}{5}$ d) $\frac{3}{7}$

(6) The perimeter of two consecutive faces in a cube 36 cm, then its volume = $\dots\dots\text{cm}^3$

- a) 36 b) 6 c) 729 d) 216

(7) All of the following are descriptive data except $\dots\dots$

- a) color b) place of birth c) age d) blood

(8) The ratio between radius of a circle and its circumference = $1 : \dots\dots$

- a) π b) 4π c) 2π d) 3π

(9) The range for 1, 4, 6, 7, 9 equals $\dots\dots$

- a) 10 b) 27 c) 8 d) 6

(10) If $\frac{x+12}{8} = 2$, then $x = \dots\dots$

- a) 6 b) 4 c) 8 d) 16

(11) The perimeter of a base of a cube is 36 cm, then its volume = $\dots\dots\text{ cm}^3$

- a) 36 b) 6 c) 729 d) 216

(12) 25% of 1000 = 50 % of $\dots\dots$

- a) 2000 b) 1500 c) 1250 d) 500

(13) Length of a tree 6 m and its length in a scale is 3 cm, then the drawing scale = $\dots\dots$

- a) 1:100 b) 1:200 c) 1:300 d) 1:600

[2] Complete each of the following with correct answers:

- 14) If $\frac{a}{b} = \frac{4}{7}$, $\frac{b}{c} = \frac{7}{9}$, then $a : b : c = \dots : \dots : \dots$
- 15) If a tap poured water 360 L/h, then the rate of poured water in one minute is L/m.
- 16) $2 \frac{1}{4}$ km : 125 m = :
- 17) An employee saves $\frac{1}{10}$ from his salary, the ratio between his saves and his salary = :
- 18) The square is a rectangle in which its diagonals
- 19) If $x\%$ of 200 = 10%, then $x = \dots$
- 20) If $x, 18, 6, 9$ are proportional, then $x = \dots$
- 21) $6500 \text{ dm}^3 = \dots \text{ m}^3$
- 22) If the degree for 6 pupils is 29, 33, 57, 40, 36, 49, then the range for these values is

[3] Answer the following questions:

- 23) An insect, its real length 0.4 mm, and its length after enlargement 4.8 cm, find the ratio of enlargement?
- 24) Nariman bought a fridge with discount 10% and she saved 400 pounds, find the cost price?
- 25) A cuboid the length of its base is 17 cm and its width 15cm, if its height $\frac{2}{3}$ width, find the volume of cuboid?
- 26) The table shows the number hours which pupils spend using computer

hours	0-	2-	4-	6-	8-10	Total
pupils	8	12	10	6	4	40

- 1) Draw the frequency curve?
- 2) How many pupils use the computer more than or equal 6 hours?

◆ ◆ ◆
End of the questions

PRIM 6 – MODEL No

14

[1] Choose the correct answer:

(1) If $\frac{2}{7} = \frac{x}{21}$, then $x = \dots\dots$

- a) 3 b) 6 c) 7 d) 42

(3) If the dimensions of cuboid are 2 cm, 5 cm and 8 cm, then the volume is $\dots\dots\text{cm}^3$

- a) 400 b) 401 c) 800 d) 80

(4) A factory produces 4000 bottle of juice in 8 hours, then its rate $\dots\dots\text{bottle/hour}$

- a) 3200 b) 500 c) 5000 d) 4008

(5) Unit for measuring capacity

- a) Feddan b) Liter c) ml d) m^2

(6) If the sum of area of all faces of a cube is 54cm^2 , then the volume = $\dots\dots\text{cm}^3$

- a) 9 b) 2916 c) 27 d) 81

(7) $12\% \div 3\% = \dots\dots$

- a) 4% b) 0.04 c) 25% d) 4

(8) If $\frac{x}{4} = 20\%$, then $x = \dots\dots$

- a) 80 b) 50 c) 0.8 d) 5

(9) Number of the parallel edges for any edge in the cube is

- a) 12 b) 11 c) 4 d) 3

(10) All of the following are quantitative data except

- a) age b) color c) length d) weight

(11) 40% of $x = 20\%$ of 300, then $x = \dots\dots$

- a) 150 b) 320 c) 600 d) 400

(12) $\frac{9}{20} = \dots\dots\%$

- a) 9 b) 20 c) 40 d) 45

(13) $300\text{ gm} : 1\frac{1}{2}\text{ kg} = 1 : \dots\dots$

- a) 3 b) 5 c) 10 d) 30

[2] Complete:

- 14) The ratio between the length of two opposite sides in a rectangle = :
- 15) Number of sets = range \div
- 16) If 2, x, x, 50 are proportional, then x =
- 17) If a parallelogram has one right angle, then it is called
- 18) $\frac{3}{4} = \dots\dots \%$
- 19) $1500 \text{ cm}^3 = \dots\dots \text{ L}$
- 20) If amount of money divided between two persons, the first took $\frac{1}{4}$ the money, then the ratio between two persons is = :
- 21) A cube the perimeter of its base equal 20 cm, then its volume = cm^3
- 22) If $a : b = 2 : 3$, $\frac{b}{c} = \frac{4}{5}$, then $a : c = \dots\dots : \dots\dots$

[3] Answer the following questions:

- 23) If the sum of edges of two consecutive faces of a cube is 56 cm, find its volume?
- 24) A merchant bought goods for 4500 pounds then sold it with profit, if the ratio between the profit and cost price 2 : 9, find the selling price.
- 25) If the distance between two cities 25 km, find the distance on a map if the drawing scale equals 1 : 100000?
- 26) A metallic cube the length of its edge 12 cm, it wanted to be melted into small cuboid its dimension 3 cm, 4 cm and 6 cm. how many cuboids can be formed?

End of the questions

PRIM 6 – MODEL NO

15

Integration pupils - First term

[1] Choose the correct answer:

(1) The range for the values (3 , 8 , 9 , 2) is

- a) 2 b) 3 c) 5 d) 7

(2) Two diagonals are perpendicular in

- a) Square b) Rectangle c) Parallelogram d) Trapezium

(3) 3 Liters = Cm^3

- a) 30 b) 3 c) 3000 d) 0.3

(4) The cube has edges

- a) 6 b) 3 c) 12 d) 8

(5) The volume of cube whose edge 3 cm is Cm^3

- a) 3 b) 9 c) 27 d) 12

(6) The ratio between side of square and its perimeter = ... : ...

- a) 1 : 4 b) 4 : 1 c) 1 : 3 d) 3 : 1

(7) All the following data are quantitative except

- a) Length b) Age c) Birth place d) Blood type

(8) $\frac{1}{4} = \dots\dots\%$

- a) 40 b) 25 c) 30 d) 60

(9) A car covered 180 km in 6 hours, then its speed km / h

- a) 20 b) 30 c) 40 d) 50

(10) The volume of Cuboid whose dimensions 2cm , 3 cm , 4 cm is

- a) 2 cm^3 b) 24 cm^3 c) 9 cm^3 d) 4 cm^3

[2] Choose from Column (B) the suitable for column (A):

Column (A)		Column (B)
1)	Number of edges of cube = ...	Height
2)	The ratio between two different kinds of quantities is	Proportion
3)	Equality between two ratios...	Rate
4)	3 liter =	12
5)	Volume of Cuboid = area of base \times	3 dm^3

[3] Put (✓) for right answer and (✗) for wrong answer:

- 1) The numbers 1, 2, 6, 12 are proportional ()
- 2) The favorite color is from descriptive data ()
- 3) The volume of cube whose length $3 \text{ cm} = 9 \text{ cm}^3$ ()
- 4) The liter is unit of measuring capacity ()
- 5) Two diagonal are equal in rhombus ()

◆◆◆
End of the questions

..... Governorate
..... Educational Zone
Midyear Exam 20 \ 20

Grade: 6th primary
Subject :Math
Model exam (1)

[A] Choose the correct answer from those between brackets:

- (1) The two diagonals are perpendicular and not equal in ...
(A) parallelogram (B) Rectangle (C) Rhombus (D) square
-
- (2) All of the following are quantitative data except
(A) color (B) place of birth (C) age (D) length
-
- (3) If the parallelogram has one right angle and the two adjacent sides are equal in length, then it's called
(A) Rhombus (B) Square (C) Triangle (D) Rectangle
-
- (4) If the greatest value for a set of numbers is 57 and the smallest one is 29, then the range is
(A) 86 (B) 68 (C) 28 (D) 82
-
- (5) Three eighths what has Mohamed equal three fourths what has Ahmed, then the ratio between Mohamed and Ahmed is.....
(A) $\frac{1}{2}$ (B) 2 : 1 (C) $\frac{3}{4}$ (D) 4 : 3
-
- (6) $300 \text{ mm}^3 = \dots\dots\dots \text{ cm}^3$
(A) 0.3 (B) 0.03 (C) 0.003 (D) 0.0003

(7) $4\% \times 3\% = \dots\dots\dots$

- (A) 12 (B) 12% (C) 0.012% (D) 0.12%

(8) 40% of amount = $x\%$ from its half, then $x = \dots\dots\dots$

- (A) 20 (B) 80 (C) 10 (D) 15

(9) The perimeter of two adjacent faces of cube is 42cm, then the volume = $\dots\dots\dots$

- (A) 216 cm^3 (B) 343 cm^3 (C) 27 cm^3 (D) 60 cm^3

(10) The range for 7 , 3 , 6 , 19 , 15 is $\dots\dots\dots$

- (A) 9 (B) 10 (C) 12 (D) 16

(11) $5600 \text{ cm}^3 = \dots\dots\dots \text{ L}$

- (A) 56 (B) 0.05 (C) 5.6 (D) 0.56

(12) All of the following are descriptive data except $\dots\dots\dots$

- (A) color (B) place of birth (C) age (D) blood

(13) If 4 , x , 12 , 18 are proportional, then $x = \dots\dots\dots$

- (A) 3 (B) 4 (C) 6 (D) 12

[B] Complete:

(14) If $\frac{2}{3} = \frac{10}{x}$ then $x + 5 = \dots\dots\dots$

- (15) The ratio between the perimeter of a square and it's side length = :
- (16) Sum of measures of any two consecutive angles in parallelogram
- (17) 100% of a mount =
- (18) The diagonal of a square divide the vertex into two angles the measure of each them
- (19) = greatest value - smallest value.
- (20) The ratio between 18 hours and one day (in the simplest form) is
- (21) $\frac{2X}{3} = \frac{8}{5}$, then $x - 1 = \dots\dots\dots$
- (22) $A : b = 33 \frac{1}{3} \%$, then $b : a = \dots\dots\dots \%$

[c] Solve the following problems

- (23) an insect has been magnified for ten times the real length, if the length in picture is 1.4 cm, **find** the real length in mm.

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(24) ABCD is a parallelogram in which, $m(\angle C) = 60^\circ$,
 $m(\angle A) = 2x^\circ$, $m(\angle B) = 3y^\circ$, find the value of x and y ?

(25) A container as a cuboid shaped the dimensions for its base 30 cm and 40 cm, its height 35 cm, poured in it water up to $\frac{5}{7}$ of it then put in it a small cubes the edges length 5cm up to fill the container, what's the number of small cubes?

(26) The table shows the money which the students donated for a hospital:

Amount	10 -	20 -	30 -	40 -	50-	Total
Number of students	5	12	15	13	6	36

Draw the frequency curve?

..... Governorate
..... Educational Zone
Midyear Exam 20 \ 20

Grade: 6th primary
Subject :Math
Model exam (2)

[A] Choose the correct answer from those between brackets:

(1) If $A : B = 5 : 6$ and $B : C = 8 : 9$, then $A : C =$

- (A) 20 : 24 (B) 20 : 27 (C) 48 : 27 (D) 5 : 9

(2) If $\frac{Y-1}{2} = \frac{8}{Y-1}$, then $y =$

- (A) 3 (B) 16 (C) 4 (D) 5

(3) If $\frac{2}{3}$ % of $x = 2$, then $x =$

- (A) 30 (B) 300 (C) 3 (D) $\frac{1}{30}$

(4) If 100 gram from food stuff gives 300 calories. How many calories will be given from 30 gram of this food....

- (A) 90 (B) 100 (C) 900 (D) 9000

(5) $\frac{2}{3} : 3\frac{1}{3} =$

- (A) 1 : 2 (B) 2 : 5 (C) 1 : 10 (D) 1 : 5

(6) If the number of pages of a book is 34 pages, how many times of appearance number 3 = ...

- (A) 6 (B) 7 (C) 8 (D) 9

(7) $\frac{5}{9} = \frac{15}{x}$, then $x =$

- (A) 3 (B) 5 (C) 15 (D) 27

(8) If 75% from the length of cloth = 6 meters, then the length of cloth =

- (A) 4 (B) 10 (C) 8 (D) 12

(9) The ratio between the two numbers $3\frac{1}{5}$, 9.6 =

- (A) $\frac{1}{6}$ (B) $\frac{3}{2}$ (C) $\frac{1}{3}$ (D) $\frac{2}{3}$

(10) A box in cube shaped made from the wood the outer volume is 1000 cm^3 and its capacity 729 cm^3 , then the volume of wood =

- (A) 271cm^3 (B) 271cm^2 (C) 1729cm^3 (D) 1729cm^2

(11) $39\% + \frac{1}{2} + 0.1 = \dots\dots\dots \%$

- (A) 99 (B) 90 (C) 70 (D) 49

(12) A merchant sold good with profit 12%, then the percentage for selling price to cost price =

- (A) 88 (B) 112 (C) 48 (D) 12

(13) The length of an insect in a picture 4cm, and the real length 2mm, then the scale is

- (A) 1 : 20 (B) 1 : 18 (C) 20 : 1 (D) 80 : 1

[B] Complete:

(14) 12 % Of 89 kg = kg

- (15) The ratio between 18 hours and one day (in the simplest form) is :
- (16) A rectangle is a parallelogram which
- (17) 8 hours : $3\frac{1}{3}$ days = :
- (18) If $a : b = 2 : 3$, $b : c = 6 : 7$ then $a : c =$
- (19) If X , 18 , 6 , 9 are proportional quantities then X =
- (20) Range for 29 , 25 , 49 , 35 is
- (21) If the radius length exceeds by 5 % , then the circumference of the circle exceeds by %
- (22) The ratio between the side length of the square and its Perimeter = :

[c] Solve the following problems

- (23) Amount of money divided into two persons with ratio 3 : 5, if the share of second more than the first by 30 pounds, find the share of the first?

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(24) Ahmed draw a picture for his brother with scale 1:40 , if the real length is 160cm, **find** the drawing length?

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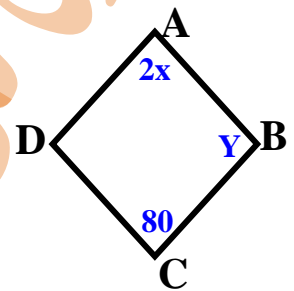
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(25) In the opposite figure:

ABCD is a rhombus which $m(\angle BCD) = 80^\circ$, $AB = 5$ cm, **find**. the perimeter of ABCD and value of x and y ?



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(26) The table shows degrees of 100 students in mathematics exam:

Degrees	20 -	30 -	40 -	50 -	Total
Number	15	30	40	15	100

Draw the frequency curve

.....

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.....

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..... Governorate
..... Educational Zone
Midyear Exam 20 \ 20

Grade: 6th primary
Subject :Math
Model exam (3)

[A] Choose the correct answer from those between brackets:

(1) The range of the set of the values 3 , 9 , 1 , 6 is

- (A) 2 (B) 3 (C) 6 (D) 8

(2) 10% of a number = % of the half of this number

- (A) 5 (B) 10 (C) 15 (D) 20

(3) $\frac{2}{3} \times 0.4 \times 37.5 \% \times 10 = \dots\dots\dots \%$

- (A) 1 (B) 100 (C) 2 (D) $\frac{1}{100}$

(4) The perimeter of rectangle is 32cm, its width 6cm, then length = width

- (A) $\frac{2}{5}$ (B) $\frac{5}{2}$ (C) $\frac{3}{5}$ (D) $\frac{5}{3}$

(5) If: $11 \frac{1}{9} \%$ of $x = 9$, then $x = \dots\dots\dots$

- (A) 90 (B) $\frac{1}{9}$ (C) 0,9 (D) 81

(6) 25 % of 80 = 80 % of

- (A) 25 (B) 2040 (C) 80 (D) 109

(7) The range for 7 , 9 , 3 , 11 is

- (A) 7 (B) 8 (C) 6 (D) 9

(8) $\frac{2}{5} \% = \frac{1}{\dots}$

- (A) 40 (B) 125 (C) 250 (D) 100

(9) If x, 9 , 4 , x are proportional then x = where $x > \text{zero}$

- (A) 6 (B) 63 (C) 4 (D) 9

(10) ABCD is a parallelogram, $m(\angle A) = 2x$, $m(\angle B) = x + 30$

Then $x = \dots$ (A) 40 (B) 80 (C) 50 (D) 100

(11) $0.5 \text{ m}^3 = \dots \text{ L}$

- (A) 5 (B) 50 (C) 500 (D) 5000

(12) A drawing scale 1:2000 means for each 1cm represent M

- (A) 0.2 (B) 2 (C) 20 (D) 200

(13) The range for 3 , 9 , 1 , 6 =

- (A) 2 (B) 3 (C) 6 (D) 8

[B] Complete:

- (14) $0,5 \text{ m}^3 = \dots\dots\dots$ Liter
- (15) If amount of money divided between two persons as $2 : 3$, then the share of the first = $\frac{\dots\dots}{\dots\dots}$ the amount
- (16) $6 \frac{1}{4} \% = 1 : \dots\dots\dots$
- (17) The edge length of a cube 0.1dm , then the volume =
- (18) is compare way between two different quantities.
- (19) If the volume of a cube 8000 cm^3 , then the edge length =
- (20) The quadrilateral which each two opposite sides are parallel and equal in length is
- (21) $50 \% : 33 \frac{1}{3} \% = \dots\dots : \dots\dots$ in simplest form.
- (22) The diagonals are equal and not perpendicular in

[c] Solve the following problems

- (23) three persons set a trade the first paid half of the second, the second paid half of the third, at the end of the year the profit was 5600 pounds, find the share of each them?

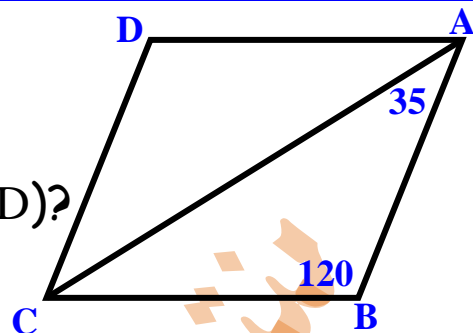
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(24) In the opposite figure: ABCD is a parallelogram which $m(\angle B) = 120^\circ$, $m(\angle BAC) = 35^\circ$, find $m(\angle D)$ and $m(\angle CAD)$?



(25) a merchant bought a car for 45000pounds and repair it with 5000 pounds, then sold it for 55000 pounds, find the percentage for the profit?

(26) The table shows the number of hours for 50 students daily

Hours	2 -	4 -	6 -	8 -	10-	Total
Number	6	11	15	13	50

- 1- Complete the table?
- 2- Draw the frequency curve?

Answer the test model

Mathematics

Sixth grade primary first term 2020

Number questions	Type of question	score	Degree of student	
13	Choose	13	
9	Complete	9	
4	Solve problems	8	
Total		30		

Subject: Math

Grade: 6th primary

Model Answer (1)

[A] question answer Choose the correct answer

(1) The two diagonals are perpendicular and not equal in square
(A) parallelogram (B) square (C) Rhombus (D) Rectangle

(2) All of the following are quantitative data except color
(A) color (B) date of birth (C) age (D) length

(3) If the parallelogram has one right angle and the two adjacent sides are equal in length, then it's called Square
(A) Rhombus (B) Square (C) Triangle (D) Rectangle

(4) If the greatest value for a set of numbers is 57 and the smallest one is 29, then the range is $57 - 29 = 28$
(A) 86 (B) 68 (C) 28 (D) 82

(5) Three eighths what has Mohamed equal three fourths what has Ahmed, then the ratio between Mohamed and Ahmed is $2 : 1$

(A) $\frac{1}{2}$ (B) $2 : 1$ (C) $\frac{3}{4}$ (D) $4 : 3$

(6) $300 \text{ mm}^3 = \underline{0.3 \text{ cm}^3}$

(A) 0.3 (B) 0.03 (C) 0.003 (D) 0.0003

Answer the test model for the Sixth grade primary First Term 2020 (٢)

(7) $4\% \times 3\% =$ 0.12%

(A) 12

(B) 12%

(C) 0.012%

(D) 0.12%

(8) 40% of amount = x % from its half, then x = 80

(A) 20

(B) 80

(C) 10

(D) 15

(9) The perimeter of two adjacent faces of cube is 42cm, then the volume Character length= 7cm , the volume =343

(A) 216 cm³

(B) 343 cm³

(C) 27 cm³

(D) 60 cm³

(10) The range for 7 , 3 , 6 , 19 , 15 is 19 - 3 = 16

(A) 9

(B) 10

(C) 12

(D) 16

(11) 5600 cm³ = 5.6 L

(A) 56

(B) 0.05

(C) 5.6

(D) 0.56

(12) All of the following are descriptive data except age

(A) color

(B) place of birth

(C) age

(D) blood

(13) If 4 , x , 12 , 18 are proportional, then x = $\frac{4 \times 18}{12} = 6$

(A) 3

(B) 4

(C) 6

(D) 12

[B] question answer Complete:

(14) If $\frac{2}{3} = \frac{10}{x}$ then x + 5 = 15 + 5 = 20

- (15) The ratio between the perimeter of a square and it's side length = 4 : 1
- (16) Sum of measures of any two consecutive angles in parallelogram 180°
- (17) 100% of a mount = 1
- (18) The diagonal of a square divide the vertex into two angles the measure of each them 45°
- (19) The range = greatest value - smallest value.
- (20) The ratio between 18 hours and one day (in the simplest form) is 18 : 24 = 3 : 4
- (21) $\frac{2X}{3} = \frac{8}{5}$, then $x = \frac{3 \times 8}{2 \times 5} = 2,4 \Rightarrow x-1 = 2,4 - 1 = 1,4$
- (22) $A : b = 33\frac{1}{3} \%$, then $b : a = \underline{300 \%}$

[c] question answer problems

- (23) an insect has been magnified for ten times the real length, if the length in picture is 1.4 cm, find the real length in mm.

drawing length : real length

1 : 10

1,4 : ??

$$\text{the real length} = \frac{1,4 \times 10}{1} = 14 \text{ cm} = 140 \text{ mm}$$

(24) ABCD is a parallelogram in which, $m(\angle C) = 60^\circ$

$m(\angle A) = 2x^\circ$, $m(\angle B) = 3y^\circ$, find the value of x and y ?

$$m(\angle C) = m(\angle A) = 2x = 60 \Rightarrow x = 30^\circ$$

$$m(\angle B) = 180 - 60 = 120 = 3y \Rightarrow y = 40^\circ$$

(25) A container as a cuboid shaped the dimensions for its base 30 cm and 40 cm, its height 35 cm, poured in it water up to $\frac{5}{7}$ of it then put in it a small cubes the edges length 5cm up to fill the container, what's the number of small cubes?

$$\text{Capacity A container} = 30 \times 40 \times 35 = 42000 \text{ cm}^3$$

$$\text{Capacity A water} = 42000 \times \frac{5}{7} = 30000 \text{ cm}^3$$

$$\text{size of the cube} = 5 \times 5 \times 5 = 125 \text{ cm}^3$$

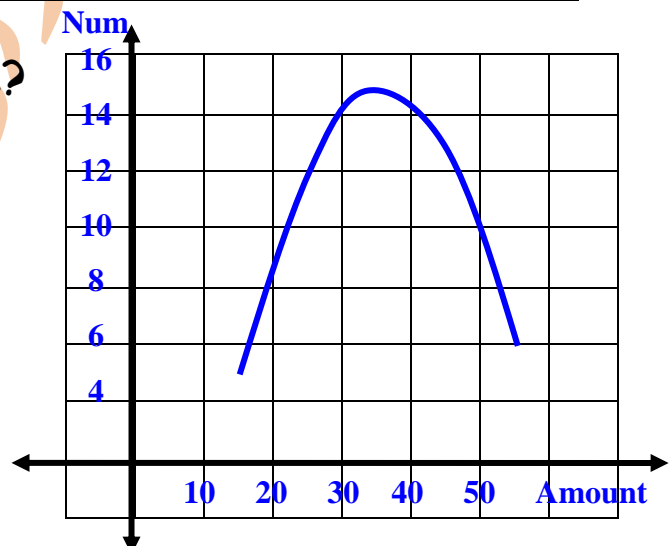
$$\text{Volume of all cubes} = 42000 - 30000 = 12000 \text{ cm}^3$$

$$\text{Number of cubes} = 12000 \div 125 = 96 \text{ cubes}$$

(26) The table shows the money which the students donated for a hospital:

Amount	10 -	20 -	30 -	40 -	50-	Total
Number of students	5	12	15	13	6	36

Draw the frequency curve?



Subject: Math

Grade: 6th primary

Model Answer (2)

[A] question answer Choose the correct

(1) If $A : B = 5 : 6$ and $B : C = 8 : 9$, then $A : C =$ 20 : 27

- (A) 20 : 24 (B) 20 : 27 (C) 48 : 27 (D) 5 : 9

(2) If $\frac{Y-1}{2} = \frac{8}{Y-1}$, then $y =$ 5

- (A) 3 (B) 16 (C) 4 (D) 5

(3) If $\frac{2}{3} \%$ of $x = 2$, then $x =$ 300

- (A) 30 (B) 300 (C) 3 (D) $\frac{1}{30}$

(4) If 100 gram from food stuff gives 300 calories. How many calories will be given from 30 gram of this food 90

- (A) 90 (B) 100 (C) 900 (D) 9000

(5) $\frac{2}{3} : 3 \frac{1}{3} = \frac{2}{3} : \frac{10}{3} = 2 : 10 = 1 : 5$

- (A) 1 : 2 (B) 2 : 5 (C) 1 : 10 (D) 1 : 5

(6) If the number of pages of a book is 34 pages, how many times of appearance number 3 = 9

- (A) 6 (B) 7 (C) 8 (D) 9

(7) $\frac{5}{9} = \frac{15}{x}$, then $x =$ 27

- (A) 3 (B) 5 (C) 15 (D) 27

(8) If 75% from the length of cloth = 6 meters, then the length of cloth = $(6 \times 100) \div 75 = 8$

(A) 4

(B) 10

(C) 8

(D) 12

(9) The ratio between the two numbers $3\frac{1}{5}$, $9.6 = \frac{16}{5} : \frac{96}{10} = \frac{1}{3}$

(A) $\frac{1}{6}$

(B) $\frac{3}{2}$

(C) $\frac{1}{3}$

(D) $\frac{2}{3}$

(10) A box in cube shaped made from the wood the outer volume is 1000 cm^3 and its capacity 729 cm^3 , then the volume of wood = $1000 - 729 = 271 \text{ cm}^3$

(A) 271 cm^3

(B) 271 cm^2

(C) 1729 cm^3

(D) 1729 cm^2

(11) $39\% + \frac{1}{2} + 0.1 = 99\%$

(A) 99

(B) 90

(C) 70

(D) 49

(12) A merchant sold good with profit 12%, then the percentage for selling price to cost price = 112%

(A) 88

(B) 112

(C) 48

(D) 12

(13) The length of an insect in a picture 4cm, and the real length 2mm, then the scale is $40 : 2 = 20 : 1$

(A) 1 : 20

(B) 1 : 18

(C) 20 : 1

(D) 80 : 1

[B] question answer Complete:

(14) 12 % Of 89 kg = 10.68 kg

(15) The ratio between 18 hours and one day (in the simplest form) is 18 : 24 = 3 : 4

(16) A rectangle is a parallelogram which Its diameter is equal in length

(17) 8 hours : $3 \frac{1}{3}$ days = $8 : \frac{10}{3} \times 30 = 8 : 100 = 2 : 25$

(18) If $a : b = 2 : 3$, $b : c = 6 : 7$ then $a : c =$ $12 : 21 = 4 : 7$

(19) If X , 18 , 6 , 9 are proportional quantities then X = 12

(20) Range for 29 , 25 , 49 , 35 is $49 - 25 = 24$

(21) If the radius length exceeds by 5 % , then the circumference of the circle exceeds by 5 %

(22) The ratio between the side length of the square and its Perimeter = 1 : 4

[c] question answer problems

(23) Amount of money divided into two persons with ratio 3 : 5 , if the share of second more than the first by 30 pounds, find the share of the first?

First : Second : difference

3 : 5 : 2
?? : 30

the share of the first = $\frac{3 \times 30}{2} = 45$ pounds

(24) Ahmed draw a picture for his brother with scale 1:40 , if the real length is 160cm, find the drawing length?

drawing length : real length

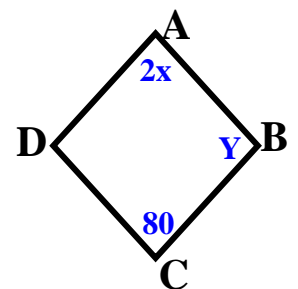
$$1 : 40$$

$$?? : 160$$

$$\text{the drawing length} = \frac{1 \times 160}{40} = 4 \text{ cm}$$

(25) In the opposite figure:

ABCD is a rhombus which $m(\angle BCD) = 80^\circ$, $AB = 5 \text{ cm}$, find. the perimeter of ABCD and value of x and y ?



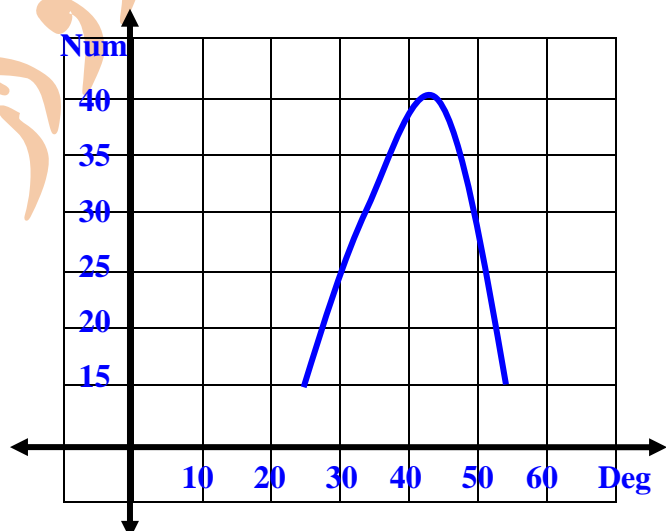
$$\text{the perimeter} = 5 \times 4 = 20 \text{ cm}$$

$$2X = 80 \Rightarrow X = 40^\circ, \quad Y + 80 = 180 \Rightarrow Y = 100^\circ$$

(26) The table shows degrees of 100 students in mathematics exam:

Degrees	20 -	30 -	40 -	50 -	Total
Number	15	30	40	15	100

Draw the frequency curve



Subject: Math

Grade: 6th primary

Model Answer (3)

[A] question answer Choose the correct

(1) The range of the set of the values 3 , 9 , 1 , 6 is 8

(A) 2

(B) 3

(C) 6

(D) 8

(2) 10% of a number = 20 % of the half of this number

(A) 5

(B) 10

(C) 15

(D) 20

(3) $\frac{2}{3} \times 0.4 \times 37.5 \% \times 10 = \underline{100} \%$

(A) 1

(B) 100

(C) 2

(D) $\frac{1}{100}$

(4) The perimeter of rectangle is 32cm, its width 6cm, then length = $\frac{5}{3}$ width

(A) $\frac{2}{5}$

(B) $\frac{5}{2}$

(C) $\frac{3}{5}$

(D) $\frac{5}{3}$

(5) If: $11\frac{1}{9} \%$ of $x = 9$, then $x = \frac{100}{9 \times 100} \times 9 \Rightarrow x = 81$

(A) 90

(B) $\frac{1}{9}$

(C) 0,9

(D) 81

(6) 25 % of 80 = 80 % of 25

(A) 25

(B) 2040

(C) 80

(D) 109

(7) The range for 7 , 9 , 3 , 11 is $11 - 3 = 8$

(A) 7

(B) 8

(C) 6

(D) 9

Answer the test model for the Sixth grade primary First Term 2020 (١٠)

(8) $\frac{2}{5} \% = \frac{1}{\underline{250}}$

(A) 40

(B) 125

(C) 250

(D) 100

(9) If $x, 9, 4, x$ are proportional then $x = \underline{6}$ where $x > \text{zero}$

(A) 6

(B) 63

(C) 4

(D) 9

(10) ABCD is a parallelogram, $m(\angle A) = 2x$, $m(\angle B) = x + 30$

Then $x = \underline{50^\circ}$

(A) 40

(B) 80

(C) 50

(D) 100

(11) $0.5 \text{ m}^3 = \underline{5000} \text{ L}$

(A) 5

(B) 50

(C) 500

(D) 5000

(12) A drawing scale 1:2000 means for each 1cm represent

2000 cm = 20 M

(A) 0.2

(B) 2

(C) 20

(D) 200

(13) The range for 3, 9, 1, 6 = 9 - 1 = 8

(A) 2

(B) 3

(C) 6

(D) 8

[B] question answer Complete:

(14) $0,5 \text{ m}^3 = \underline{500} \text{ Liter}$

(15) If amount of money divided between two persons as

$2 : 3$, then the share of the first = $\frac{2}{5}$ the amount

(16) $6 \frac{1}{4} \% = \underline{1 : 16}$

(17) The edge length of a cube 0.1dm, then the volume $= 1 \text{ cm}^3$

(18) The ratio is compare way between two different quantities.

(19) If the volume of a cube 8000 cm^3 , then the edge length $= 20 \text{ cm}$

(20) The quadrilateral which each two opposite sides are parallel and equal in length is parallelogram

(21) $50 \% : 33 \frac{1}{3} \% = \underline{3 : 2}$ in simplest form.

(22) The diagonals are equal and not perpendicular in rectangle

[c] question answer problems

(23) three persons set a trade the first paid half of the second, the second paid half of the third, at the end of the year the profit was 5600 pounds, find the share of each them?

First : Second : Third : Total

1 : 2 : 4 : 7

? : ? : ? : 5600

the share of the first = $\frac{1 \times 5600}{7} = 800 \text{ pounds}$

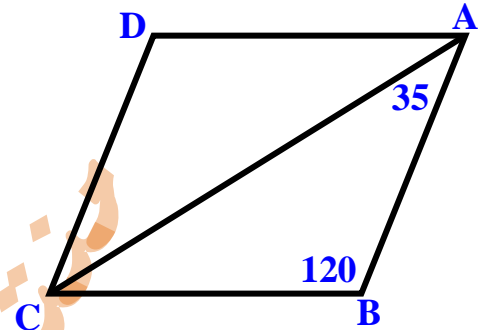
Second = $\frac{2 \times 5600}{7} = 1600 \text{ p}$, Third = $\frac{4 \times 5600}{7} = 3200 \text{ p}$

- (24) In the opposite figure: ABCD is a parallelogram which $m(\angle B) = 120^\circ$, $m(\angle BAC) = 35^\circ$, find $m(\angle D)$ and $m(\angle CAD)$?

$$m(\angle D) = m(\angle B) = 120^\circ$$

$$m(\angle A) = 180 - 120^\circ = 60^\circ$$

$$m(\angle CAD) = 60 - 35^\circ = 25^\circ$$



- (25) a merchant bought a car for 45000pounds and repair it with 5000 pounds, then sold it for 55000 pounds, find the percentage for the profit?

$$\text{Costs} = 45000 + 5000 = 50000 \text{ pounds}$$

$$\text{profit} = 55000 - 50000 = 5000 \text{ pounds}$$

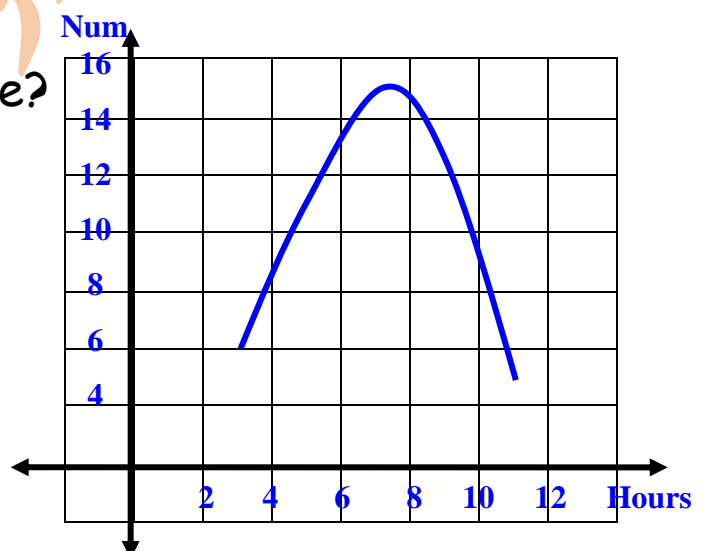
$$\text{by profit} = \frac{5000 \times 100}{50000} = 10\%$$

- (26) The table shows the number of hours for 50 students daily

Hours	2 -	4 -	6 -	8 -	10 -	Total
Number	6	11	15	13	5	50

- Complete the table?
- Draw the frequency curve?

$$50 - (6+11+15+13) = 5$$



Model Exams

Model (1)

(1) Complete the following:

- If $a : b = 3 : 4$, $b : c = 5 : 6$, then $a : c = \dots\dots\dots$
- The rhombus is a parallelogram in which.....
- If the volume of a cuboid equals 400cm^3 , and its base length = 8cm , and width = 5cm , then its height equalscm
- If $\frac{5}{7}x = 5$, $x = \dots\dots\dots$
- If the purchase price of a refrigerator is 1200 pounds and its selling price equals 1440 pounds , then the percentage of the profit equal.....%

(2) Choose the correct answer:

- 500 gm : 1.5 kg =
 - 1 : 2
 - 1 : 3
 - 1 : 5
 - 1 : 10
- The numbers 4 , x , 12 , 18 were in proportion , then the value of x =
 - 2
 - 3
 - 6
 - 54
- $\frac{7}{4} = \dots\dots\dots \%$
 - 175
 - 150
 - 125
 - 225
- 4.7 liter = ml.
 - 47
 - 470
 - 4700
 - 47000
 -

(3) Knowing that :

a) $x : y = 2 : 5$ and $y : z = 3 : 4$, find $x : z$

b) 96% of the students of a school have succeeded in the

mid-year exam. Knowing that 15 students have failed , find the total number of students in the school.

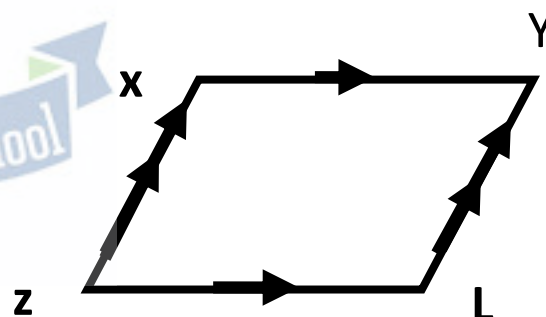
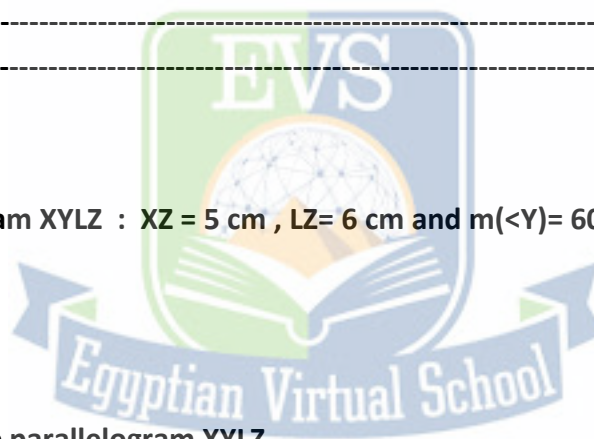
(4) The perimeter of a rectangle is 120 cm , the ratio between its length and its width is 3 : 2 find the area of this rectangle.

(5) In the parallelogram XYLZ : $XZ = 5$ cm , $LZ = 6$ cm and $m(\angle Y) = 60^\circ$ Find :

a) $m(\angle X)$

b) $m(\angle L)$

c) The perimeter of the parallelogram XYLZ .



(6) The following table shows the frequency distribution of the weights of 100 persons.

Sets	60 -	63 -	66 -	69 -	72 -
Frequency	5	18	42	27	8

Draw the frequency curve for this data .



Model (2)

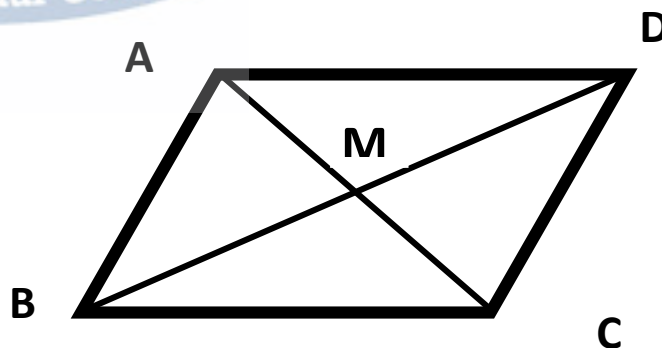
(1)Complete:

- a) 25% of L.E12 =..... piasters.
- b) 9cm. on a map represents 180 km in reality, the scale of that map is.....
- c) The fourth proportional of 1, 2 and 3 is
- d) $\longrightarrow \uparrow \longleftarrow \uparrow \longrightarrow$ (Draw the next)

(2) We share an amount of money between three persons so that the ratio between the share of the first and the share of the second 1: 2 and the ratio between the share of the second and the share of the third is 5: 6, knowing that the share of the second person exceeds the share of the first by 1500LE, find the share of each of the three persons.

(3)

- a) ABCD is a parallelogram in which AD= 6 cm, AB= 5cm. and AM= 4 cm Calculate the perimeter of the $\triangle ABC$.



B) A group of contributors paid sums of money in pounds as shown in the following table :

The sum	50 -	60 -	70 -	80 -	90 -	100 -	110 -
Number of contributors	5	7	10	12	10	7	5

1) What is the number of contributors paid L.E 80 and more

2) Represent the previous data by the frequency curve?



Model (3)

(1)The following table represents the percentage number of students in the primary classes of a school:

Class	Primary1	Primary2	Primary3	Primary4	Primary5	Primary 6
percentage	15%	16%	21%	12%	19%	17%

Knowing that there are 32 students in primary 2, calculate the number of students in each class.

(2)Complete:

- 50% of 1 =
- 12% of= 12
- The ratio between the perimeter of the square and its side length is -----: -----
- The third proportional of 5, 2, ----- and 4 is
- 0.5 kilograms: 5 gram =:
- If 60% of 20added to 21% of 100 the result will be

(3)Choose:

- The opposite angles are not equal in measure in
 - Parallelogram
 - Trapezium
 - Square
 - Rectangle
- A worker paints a wall of area $100m^2$ in 8 hours then the rate of the work= m^2 /hour
 - 108
 - 800
 - 12.5
 - 92

c) The capacity of a vessel of inner dimensions 20 cm , 20 cm and 30 cm is

1. 0.12
2. 1.2
3. 12
4. 120

d) Two diagonals are perpendicular in the

1. Rectangle
2. Rhombus
3. Parallelogram
4. Trapezium

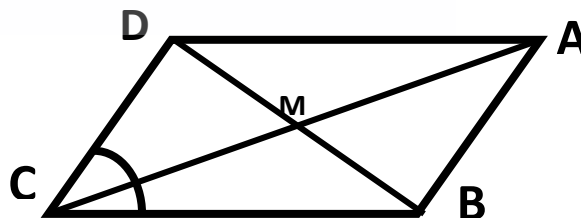
(4) A merchant bought goods for 960 L.E and spends 20 L.E for its transportation, then he sells it for 1176 L.E. Find the percentage of his profit?

(5) ABCD is a parallelogram in which:

AB= 6cm, BC=7cm, BM=4cm and $m(\angle DCB) = 71^\circ$

Find:

- 1) $m(\angle ADC)$ 2) $m(\angle DAB)$ 3) Perimeter of $\triangle BCD$



Model (4)

(1) Write (True) or (false)?

- a) A cuboid has 8 faces (.....)
- b) If the volume of a cube is 125cm^3 , then its edge length is 5cm (.....)
- c) The cube is a cuboid in which all the dimensions are equal (.....)
- d) A cuboid with a square base must be a cube. (.....)

(2) The dimensions of a wooden solid having the shape of a cuboid are 4, 4 and 20 cm

- a) Calculate the volume of this solid.

.....

.....

.....

- b) If we cut the solid into identical cubes of maximum size.

Calculate the volume of each of these cubes.

.....

.....

.....

(3) Choose the correct answer:

- a) Cubic meter is a unit of measuring

1. Perimeter
2. Weight
3. Area
4. Volume

b) $6.3 : 18.9 = \dots : \dots$ (In the simplest form)

1. 3:4
2. 4:3
3. 1:3
4. 1:2

c) If $\frac{a}{b} = \frac{c}{d}$ then which of the following statements is true?

1. $axc = bxd$
2. $axd = bxc$
3. $axb = cxd$

d) ○ △ ○ ○ △

.....

(In the same pattern)

1. △ ○ △
2. ○ ○ ○ △
3. △ △ △ ○

(4) A factory produces 5000 juice cans in 8 hours. Find the rate of production per hour?

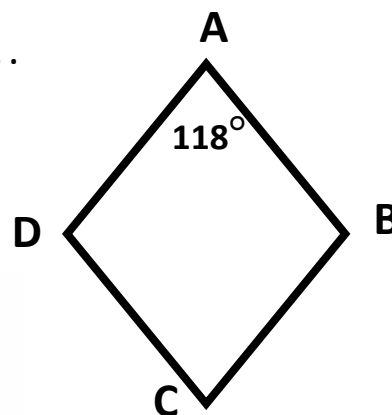
Mid-Year Exam 2015 /2016

Question (1) Complete:

- 1) $0.4 : 0.8 = \dots : \dots$. In the simplest form.
- 2) The Range of the set of these value 20, 95, 70, 45 equals
- 3) If the quantities X, 6, 20 and 30 are in proportion, then $X = \dots$.
- 4) In the opposite figure:

ABCD is a rhombus in which $m(\angle A) = 118^\circ$

Then $m(\angle B) = \dots$.



Question (2) choose the correct answer:

- 1) The cube has edges.
 1. 12
 2. 8
 3. 6
 4. 4
- 2) The given data are quantities except the
 1. Weight
 2. Length
 3. Nationality
 4. Age

3) 1.2 liters + 800 cm^3 = liters

1. 2
2. 9.2
3. 200
4. 2000

4) If 100 grams of chocolate give 300 calories .what is the number

Of calories which are found in 30grams of the same chocolate?

1. 90
2. 100
3. 900
4. 9000

Question (3):

a) If the length of sues canal in a map of drawing scale 1: 1100000 is 15 cm.

then find its real length in kilometers.

.....

.....

.....

.....

b) Three persons involved in a business, the first paid LE 60000,

the second paid LE 80000 and the third paid LE 90000. at the end

of the year the profit was LE 20700 .

Find the share of each person in profit.

Question (4) :

a) A man bought a flat for LE 100000, after three years he sold it for LE 130000. Find the percentage of his profit.

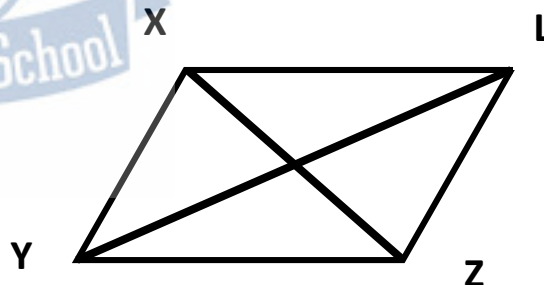
b) In the opposite figure XYZL is a parallelogram in which

$m(\angle XYZ) = 120^\circ$, $XY = 3$ cm.

$YZ = 5$ cm. and $ZM = 3.5$ cm. find:

(1) $m(\angle XLZ)$

(2) perimeter of the triangle XLZ



Question (5):

a) A container contains 12 liters of honey. It is wanted to pour it in small bottles the capacity of each of them is 400cm^3 . Calculate the number of bottles which are needed for that.

b) The following table shows the marks of 100 pupils in

Mathematics in a month.

The marks	20-	30-	40-	50-60	Total
Number of pupils	10	30	40	20	100

Draw the frequency polygon for this distribution.



Mid-Year Exam 2016 /2017

(Calculator is allowed)

Answer the following questions:

Question (1): Complete the following:

1) If $\frac{X}{8} = \frac{3}{4}$, then $X = \dots\dots\dots$

2) $\frac{2}{5} = \dots\dots\dots \%$

3) The quadrilaterals in which its diagonals are equal in length and bisect each other are called
 $\dots\dots\dots, \dots\dots\dots$

4) The difference between the greatest value and the smallest value in set of individuals is called
 $\dots\dots\dots$

Question (2): Choose the correct answer from those given:

1) If the volume of a cuboid is 24 cm^3 and the area of its base is 6 cm^2 , then its height = $\dots\dots\dots$ Cm.

1. 3

2. 4

3. 12

4. 18

2) The following data are descriptive except $\dots\dots\dots$

1. The colour

2. Place of birth

3. Age

4. Blood species

3) $1500 \text{ cm}^3 = \dots\dots\dots \text{ Liter}$

1. 0.15
2. 1.5
3. 15
4. 150

4) If an agriculture machine ploughs 14 feddans in 3.5 hours , then the rate of performance of this machine is $\dots\dots\dots \text{ feddan / hour}$

1. $\frac{1}{4}$
2. $2\frac{1}{2}$
3. 4
4. $10\frac{1}{2}$

Question (3):

a) If the distance between two cities on a map of drawing scale

1: 500 000 equals 3 cm, find the real distance between the two cities.

b) The sum of the six faces area of a cube 54cm^2 , Find:

1) Its edge length

2) Its volume

Question (4):

a) The number of pupils of a primary school in the first, second and the third grades is 240 pupils, if the ratio among the three grades is 5: 4: 3 calculate the number of pupils in each grade of them

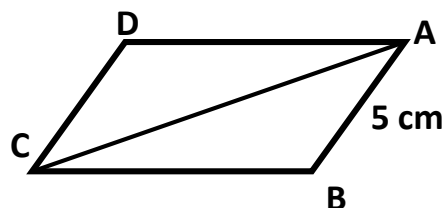
b) Heba bought an electric sweeping machine for L.E. 425 with discount 15% Calculate the original price of the sweeping machine before discount.

Question (5):

a) In the opposite figure:

ABCD is a parallelogram in which $m(\angle B) = 110^\circ$, $m(\angle DAC) = 30^\circ$

And $AB = 5$ cm. Find: 1) Length of \overline{CD} 2) $m(\angle BAC)$



b) The following table shows the marks of 100 pupils in math.

Marks	10-	20-	30-	40-	50-	Sum
Number of pupils	15	25	30	20	10	100

- 1) Draw the frequency curve for this distribution.
- 2) What is the number of pupils who get 30 marks or more?



Mid-Year Exam 2017 /2018

1) Complete the following:

- 1) 150 grams : quarter kilogram = :
- 2) 2.5 dm^3 = litres.
- 3) If $\frac{5}{9} = \frac{15}{x}$, then x =
- 4) The range of a set of the values 3 , 2 , 15 , 11 is
- 5) The smallest prime number is
- 6) The sum of measures of the interior angles of the triangle =

2) Choose the correct answer :

1) All the following data are quantitative except

1. the age
2. the weight
3. the birth place
4. the tallness)

2) The quadrilateral which its diagonals are perpendicular and equal in length is

1. rectangle
2. parallelogram
3. rhombus
4. square

3) An agricultural machine ploughs 14 feddans in 3.5 hours , then the rate of the machine in feddans per hour is.....

1. 2
2. 4

3. 49

4. 7

4) $\frac{18}{x} = 20\%$, then x =

1. 90

2. 100

3. 120

4. 190

5) The ratio between the side length of an equilateral triangle and its perimeter equals :

1. 3 : 1

2. 1 : 3

3. 1 : 1

4. 1 : 4)

6) $\frac{3}{5}$ $\frac{3}{7}$

1. <

2. >

3. =



3) a) A map was drawn with a drawing scale 1 : 6000 000 , and the real distance between two cities was 180 kilometres. Find the distance between them on the map ?

b) The perimeter of the base of a cube is 36cm , Calculate its value ?

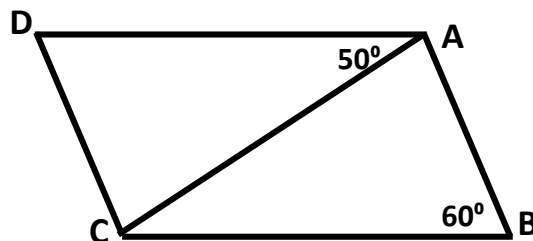
4) a) A man bought goods by L.E. 5000 , then he sold it by L.E. 4000 , calculate the percentage of his loss ?

b) The number of the pupils in a primary school is 960 pupils , if the ratio among the number of the first grade , the second grade , and the third grade is 5 : 4 : 3 , Calculate the number of pupils in each grade ?

5) a) In the opposite figure :

ABCD is a parallelogram in which $m(\angle B) = 60^\circ$, $m(\angle DAC) = 50^\circ$ Find:

1) $m(\angle D)$ 2) $m(\angle BAC)$



b) The following table shows the donation of a group of students on orphan's day in pounds .

1) Represent these data by the frequency curve.

2) What is the number of students who donated less than L.E. 7 ?

Donation amount	3-	5-	7-	9-	11-	Sum
No. of students	7	10	15	10	8	50



Mid-year Exam 2018- 2019

Question (1) choose the correct answer:

1) $\frac{7}{20} = \dots\dots\%$

1. 35
2. 40
3. 45
4. 30

2) If the numbers 2,7,x and 21 are proportional , then x =.....

1. 21
2. 12
3. 6
4. 7

3) In an equilateral triangle , the ratio between its perimeter and its side length equals =.....
:

1. 1 : 3
2. 3 : 1
3. 3 : 2
4. 2 : 3

4) The diagonals are perpendicular in

1. rectangle
2. parallelogram
3. square



4. trapezium

5) If $A : B = 2 : 5$ and $B : C = 5 : 9$ then $A : C = \dots\dots\dots$

- 1. $5 : 2$
- 2. $2 : 9$
- 3. $5 : 7$
- 4. $2 : 11$

6) The volume of a cuboid its height = 3cm .and the surface area of its base $= 12\text{cm}^2$.is
 $\dots\dots\dots\text{cm}^3$

- 1. 36
- 2. 4
- 3. 15
- 4. 9

7) ABCD is a parallelogram $m(\angle A) = 60^\circ$, then $m(\angle B) = \dots\dots\dots^\circ$

- 1. 30
- 2. 60
- 3. 120
- 4. 90

8) A car consumes 12 liters of fuel to cover a distance of 96 km . How many liter are needed to cover a distance 144 km ?

- 1. 10
- 2. 16
- 3. 18
- 4. 20

9) If the marks of 3 students in one exam are (36 , 27 , 57) , then the range or these marks

=.....

1. 30
2. 20
3. 40
4. 50

10) The real length is 6m. and the drawing length is 6 cm , then the drawing scale is

1. 1 : 10
2. 1:1000
3. 1 : 100
4. 1 : 10000

11) All the following data are descriptive data except

1. favorite color
2. age
3. birth place
4. blood species

12) $10 \text{ dm}^3 = \dots\dots\dots \text{ cm}^3$

1. 10
2. 100
3. 1000
4. 10000

Question (2) complete :

13) The number of axis of symmetry of a square is

14) A square is a rhombus with

15) 30% of 600 pounds =.....

16) 3 weeks : 24 days = :

- 17)** If car covered 280 km .in 4 hours , then the rate of covered distance per hour =
..... Km/hour
- 18)** The ratio between Sama's age to her father's age is 2 : 18 , if Sama's age is 6 years old then her father's age is
- 19)** The sum of edges of the cube is 24 cm , then its volume =..... cm^3
- 20)** The circumference of the circle : the length of its diameter =..... :

Question (3)

- 21)** Three persons started a business. The first paid $\frac{5}{6}$ of what the third paid and the second paid $\frac{7}{9}$ of what the third paid , at the end of the year ,the profit of the first was L.E 3000 , Find the profit of the second and the third.

.....

.....

.....

- 22)** The ratio between the measures of the angles of a triangle is 1 : 2 : 3 , find the measure of each angle of the triangle .

.....

.....

.....

- 23)** A metallic cube of edge length 18 cm .it is melted and converted into alloys in the form of cuboid its dimensions 6 cm , 9 cm , 12 cm . calculate the number of alloys .

.....

.....

.....

Question (4)

24) Rasha bought a dress for 660 pounds with discount 20% calculate the price of the dress before discount .

.....

.....

25) The following table shows the marks of 20 students in one of math exam :

Marks	10 -	20 -	30 -	40 -	Total
Number of students	4	6	8	2	20

Draw the frequency curve for this data .



Mid-year Exam 2019/2020

Question 1:choose the correct answer

1) If 5 ,6 ,x and 12 are proportional numbers, then $x+2=$

- 1. 12
- 2. 10
- 3. 8
- 4. 5)

2) $1\frac{3}{4}=$%

- 1. 25
- 2. 50
- 3. 75
- 4. 175

3) A car consumes 4 liters of fuel to cover distance 100 km ,then the rate of consumption isliter/hour

- 1. 25
- 2. 0.4
- 3. 0.04
- 4. 400

4) The volume of a cuboid its height=4 cm .and the surface area of its base= 12 cm^2

5) ABCD is a parallelogram, then $m(\angle A) + m(\angle B) = \dots\dots$

1. 90
2. 180
3. 360
4. 108

6) The ratio between the side length of the square and its perimeter = :

1. 4 : 1
2. 1:4
3. 8:4
4. 1:1

7) $1 - 70\% = \dots\dots\dots$

1. 0.3
2. 70
3. 0.7
4. 1



8) The range of the numbers 72,65,20,45 and 75 is

1. 40
2. 55
3. 50
4. 52

9) The ratio between 500 gm and $\frac{3}{4}$ kg is :

1. 4:3

2. 3 : 4

3. 2 : 3

4. 1 : 2

10) 20 % of 1000 =

1. 500

2. 2000

3. 200

4. 400

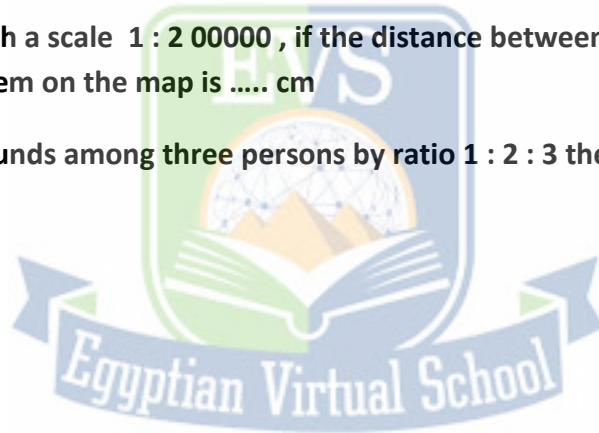
Draft :



Question 2 : Complete:

- 1) $8400 \text{ cm}^3 = \dots\dots\dots \text{ Liters}$.
- 2) The volume of the cube which the sum of all its edge lengths 36 cm =.....
- 3) If $A : B = 1 : 2$ and $B : C = 3 : 5$, then $A : C = \dots\dots : \dots\dots$
- 4) The volume of cuboid with square base with side length 5 cm and height 8 cm is cm^3
- 5) The rectangle is parallelogram in which
- 6) 3 feddan : 24 kirates = :
- 7) A map is drawn with a scale $1 : 200000$, if the distance between two cities is 8 km in reality then the length between them on the map is cm
- 8) A man divide 90 pounds among three persons by ratio $1 : 2 : 3$ the smallest share = pounds .

Draft :



3)Answer the following :

1)Two persons started a commercial business , the first paid L.E. 5000 and the second paid L.E. 8000 at the end of the year ,the profit was L.E.3900 Calculate the share of each of them from the profit.

.....

.....

.....

2)Ahmed bought a radio by L.E. 450 and sold it with profit 10 % , Find the selling price .

.....

.....

.....

3)A cube of cheese with edge length 15 cm ,it is wanted to divide it into small cuboid of dimensions 3 cm,5 cm and 1cm. find the number of the small cuboid cheese .

.....

.....

.....

4) 50 liters of water were poured in a vessel in the shape of a cuboid , its base is a square of side length 25 cm . Find the height of the water in the vessel.

.....

.....

.....

5)A piece of land in the form of a triangle , the ratio between its side length is 4 :6 : 7 ,if the perimeter of this land equals 51 m , find the length of its sides .

.....

.....

.....

6) The following table shows the marks of 30 students in one of math exam Find the missing data then , draw the frequency curve of this data .

Marks	10-	20-	30-	40-	total
Number of students	6	7	8	30





Math

6th prim

Model (1)

Q1 : Choose the correct answer :

(1) If the Ratio among the measures of angles of a triangle is $2 : 3 : 4$ then the measure of its angles in the same order are

a) 20 , 30 , 40

b) 20 , 60 , 80

c) 40 , 80 , 60

d) 40 , 60 , 80

(2) If Hazem drinks 21 glasses of milk weekly then the rate of what the drinks daily is

a) 3 glasses

b) 7 glasses

c) 14 glasses

d) 20 glasses

(3) A metallic piece in the shape of a cube of edge length 40cm it's melted & converted to a cuboid whose base area = 2000 cm^2 then it's height =

a) 16 cm

b) 32 cm

c) 64 cm

d) 80cm

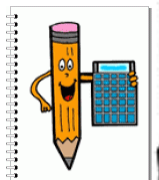
(4) On a map is drawn such that each 1 centimetre represents 5 km. then if the distance between two villages is $\frac{1}{2}$ km then the distance between them on this map in centimeter equals

a) 0.1

b) 0.4

c) 25

d) 10





Math

6th prim

(5) A merchant sold his goods with profit 15% then the percentage of the selling price to the buying price equals

a) 15 %

b) 85 %

c) 115 %

d) 150 %

Q2 :

A manufacture of clothes produces 8000 pieces daily , if the ratio between what this manufacture produce from the childrens clothes to the adults clothes 2 : 3 Find the number of pieces for children's clothes produced in 3 days.

Q3 :

a) If $\frac{x-3}{2} = \frac{5}{3}$, find the value of x ?

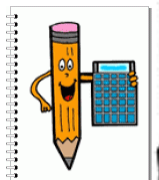
b) If the feast festival , one of the shops mode a discount 15% for the price of a refrigerator which equal 1750 pounds. Find the price of the refrigerator after discount ?

Q4 :

If a quantity of sugar with volume 2700 cm^3 need to can in a box , show which of the following boxes is suitable ? and why?

a) A cuboid with dimensions 45 cm , 40 cm & 15 cm.

b) A cube the length of its inner dimension equals 30 cm .





Math

6th prim

Q5 :

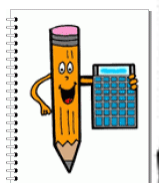
The following table shows the dates & the number of trips (in one of the bus stations for the governorates)

Dates	6 am	8 am	10 am	12 am	2 pm	Sum
Number of trips	30	41	40	16	13	140

Draw the frequency curve for this distribution , then answer the following

What is the number of trips before 10 am ?

a) What is the percentage of the number of trips from 10am till 12 am to the sum of trips?





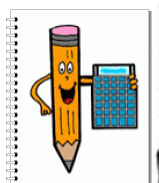
Math

6th prim

Model (2)

Q1 : Choose the correct answer :

- a) If 100 gm of food give 300 calories , then the number of calories which are found in 30 gm of the same food equals
- a) 90 calories b) 100 calories
- c) 900 calories d) 1000 calories
- b) If the area of a face of a cube = 4cm^2 then its volume in cm^3 is
- a) 6 b) 8 c) 24 d) 64
- c) A liquid is put in a glass basin in the form of a cube to be filled completely , if the capacity of the basin is one litre then the inner edge length of the basin in cm =
- a) 0.1 b) 1 c) 10 d) 100
- d) The side length of a square = 3cm then the ratio between its side length and its perimeter equals
- a) 4 b) 3 c) $\frac{1}{4}$ d) $\frac{1}{3}$
- e) The ratio between 12 kirat to $1\frac{1}{2}$ feddan equals
- a) 12 : 15 b) 4 : 1 c) 1 : 3 d) 3 : 1
- f) The range of values 7 , 3 , 6 , 9 , 5 is
- a) 3 b) 4 c) 6 d) 12





Math

6th prim

Q2 :

- a) A quantity of Honey of 2 liters is needed to be distributed into small bottle the capacity of each of them 40 cm^3 find the number of needed bottles ?
- b) An alloy is made of gold and copper , it's weight is 70 gm , the weight of copper in it is 7gm . find the percentage of the pure gold in it.

Q3 : A man sold his car after one year of using it with price L.E 52000 if its buying price was L.E 65000 find the percentage of his loss .

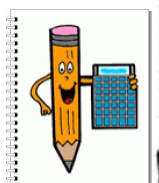
Q4 : A box in the shape of a cube in which the length of the inner edge is 36 cm . its's wanted to fill it with washing soap bars in the shape of a cube of edge length 9cm . How many bars can be put in this box .

Q5 : The following table shows the daily wages of 50 workers in a factory

Wages	10-	20-	30-	40-	50-	60-	70-80	Total
Number of workers	3	6	10	15	8	5	3	50

First : draw the frequency crive

Second : Find the percentage of the number of workers whose wages begins from L.E 30 to less than L.E 50





Math

6th prim

Model (3)

Q1 : Choose the correct answer :

(1) If $\frac{a}{b} = \frac{c}{d}$ then which of the following statements is true ?

a) $a \times c = b \times d$

b) $\frac{a}{d} = \frac{c}{b}$

c) $\frac{a-3}{b-3} = \frac{c}{d}$

d) $a \times d = b \times c$

(2) If the sum of edges length of a cube is 144 cm then it's volume equals

.....

a) 1728 cm b) 1728 cm³

c) 144 cm³

d) 144 cm

(3) At a moment , the length of the shade of a tree of height 3m was 180 cm , then same what is the length of the shade of another tree of height 2 m at the moment

a) 60 cm

b) 90 cm

c) 120 cm

d) 150cm

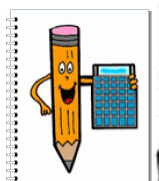
(4) A painter has 25 liters of paints. He uses 2.5 liter of paint per hour. If he finished his work after 5.5 hours. Then how many liters of paint are remained?

a) 10.25 litres

b) 11.25 litres

c) 12.75 litres

d) 13.75 litres





Math

6th prim

(5) If the price of goods in clothes shop is 240 pounds. And its price during sale is 180 pounds then the discount percentage is.....

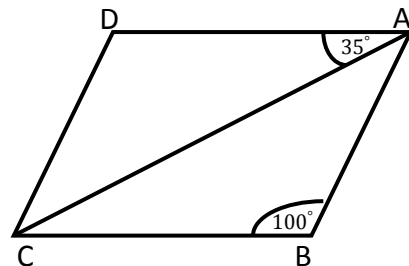
- a) 15% c) 20 % c) 25% d) 30%

Q2 :

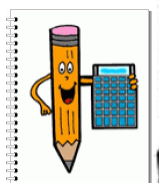
- c) If the drawing scale for a map is 1 : 1000 and the length of a road equals 5km. what is the length of this road in the map?
- d) Three persons involved in a business. The first paid 60000 pounds, the second paid 80000 pounds & the third paid 90000 pounds at the end of the year the net profit was 20700 pounds calculate the share of each of them.

Q3 :

- a) In the opposite figure ABCD is a parallelogram , find m ($\angle ACD$) :



- b) If the percentage of success for a school equals 85% and the number of the students in this school equal 800 students. If the ratio between the number of boys and the number of girls equals 2 : 3 find the number of succeeded girls in this school ?





Math

6th prim

Q4 :

A vessel in the shape of a cube whose edge length is 10.5 cm **first** :
Calculate the volume of this vessel in cm^3 **second** : How many mm^3 of
water is the capacity of this cube ?

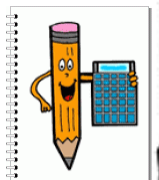
Q5 :

The following table represents the temperature degrees that expected for
30 cities.

a) Draw the frequency curve then answer the following:-

Temperature degree	24-	28-	32-	36-	40-	44-	Total
No. of cities	3	4	7	9	5	2	30

b) What is the number of cities whose temperature's are 40 degree and
more ?





Math

6th prim

Model (4)

1- Complete:

- a) 5 Kg : 3000 gm = :
- b) $1.45 \text{ L} + 0.5 \text{ dm}^3 + 50 \text{ cm}^3 = \text{..... L}$
- c) If $A:B = 2:3$, $B:C = 6:7$ then $A:C = \text{.....} : \text{.....}$
- d) A cuboid with a square base of side length 6 cm and height 10 cm then it's volume is
- e) $\frac{9}{20} = \text{.....} \%$

2- Choose the correct answer:

a) $\frac{2}{3} : 3\frac{1}{3} = \text{.....}$

a-1:2

b-2:5

c-1:10

d-1:5

b) The diagonals are perpendicular in,

a- square , rectangle

b- rhombus , rectangle

c- square , rhombus

d- parallelogram , rectangle

c) If $\frac{a}{b} = \frac{c}{d}$ so which of the following is true

a- $a \times c = b \times d$

b- $a \times d = b \times c$

c- $a \times b = c \times d$

d- $d \times c = b \times a$

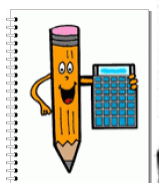
d) A plough for agricultural land ploughs 15 feddens in 10 hours then the rate of this plough = Feddens/h

a- $\frac{2}{3}$

b- $\frac{3}{2}$

c- $\frac{5}{2}$

d- $\frac{5}{3}$





Math

6th prim

e) A cube the sum of all edges 144 cm then its volume equal...

- a- 1728 cm b- 1728 cm^3 c- 144 cm^3 d- 144 cm^2

3- a) If the distance between two cities is 180 km with a drawing scale

1 : 9000000 ,find the distance between them on the map

b) A car consumes 20 liters of benzene to cover 180 km , how many liters of benzene does the car consume to cover 540 km

4- a) in the opposite figure ABCD is a parallelogram in which

$$m(\angle B) = 110^\circ$$

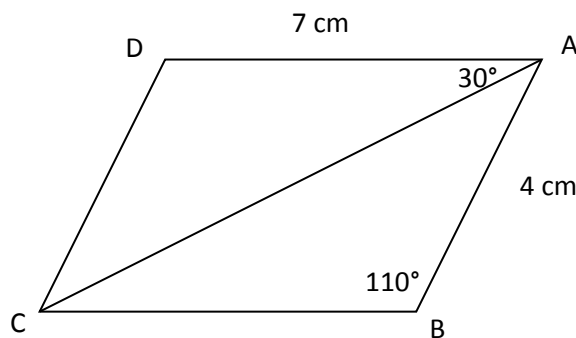
$$m(\angle DAC) = 30^\circ$$

$$AB = 4 \text{ cm}, AD = 7 \text{ cm}$$

Find , a) $m(\angle D)$, b) $m(\angle BAC)$

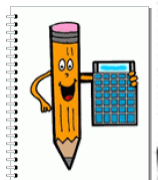
c) $m(\angle ACD)$

d) The perimeter of parallelogram



b) A sum of money is distributed between two persons in the ratio 3 : 5 ,if the share of the second exceeds the share of first by L.E 30 ,Find the share of each one

5- a) A company for electrical appliance displays the T.V set for 1062 pounds if the company sold with profit percentage is 14% , find the cost price for the T.V set





Math

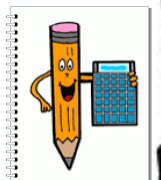
6th prim

b) The following table shows the ages of visitors to an exhibition within an hour of the day

Visitor age	10-	20-	30-	40-	50-	Total
Number of visitors	6	9	12	10	8	45

a) Draw the frequency curve for this distribution

b) What is the number of visitors whose ages less than 40 years?





Math

6th prim

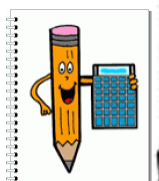
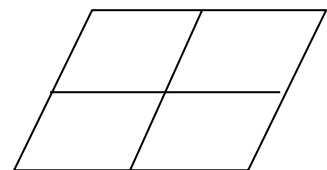
Model (5)

1- Complete:

- a) The ratio between the perimeter of the rhombus and its side length =
..... :
- b) 18 Kirats : 2 feddans = :
- c) $1500 \text{ cm}^3 = \dots\dots\dots$ Liters
- d) The range of the values 7 , 15 , 24 , 11 , 3 and 18 is
- e) The diagonals are equal in and

2- Choose the correct answer:

- a) If the ratio among the measurement of the angles is 1 : 2 : 3 then the
measure for the smallest angle equal
($10^\circ - 30^\circ - 45^\circ - 60^\circ$)
- b) If $a:b = 2:5$ then $\frac{a}{a+b} = \dots\dots\dots$ ($2:5 - 2:7 - 3:7 - 7:2$)
- c) In the opposite figure, The number of
parallelograms which can be obtained is
($4 - 5 - 7 - 9$)
- d) The following data are descriptive except :
(Favorite color – birthday – age – blood type)
- e) If the length in drawing is 2 cm ,and the real length is 6 cm .then the
drawing length is : ($1:3 - 1:30 - 1:300 - 1:300000$)





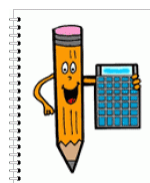
Math

6th prim

- 3- a) A metallic cube of edge length 12 cm ,its wanted to melted and convert it into ingots in the shape of cuboids each of them has the dimensions 3 cm , 4 cm ,6 cm calculate the number of ingots that are obtained
- b) Three merchants the profit of first 42% the profit of the second is 28% the profit of the third 36000 pounds what is the total profit in pounds?
- 4- a) The ratio between the length and the width of rectangle is 7:4 ,If the perimeter of the rectangle is 44 cm .Find out the length and the width of the rectangle and then calculate the area
- b) A tractor ploughs 6 feddans within 3 hours find the rate of work of this tractor , if another tractor ploughs 6 kirats in 10 minutes ,which of them is better
- 5-a) Three persons formed a company the share of first is $\frac{5}{3}$ the share of The second ,and the share of second $\frac{4}{3}$ the share of third ,If the share of first exceeds the share of the third by 8250 pounds find the share of each
- b) To help the poor people ,a group of students donated amounts of money in pounds shown in the following table .

Money in pounds	3-	5-	7-	9-	11-	Total
Number of students	7	10	15	10	8	50

- a) Draw the frequency curve for the distribution
- b) what is the number of students that donated 7 pounds or more?





Math

6th prim

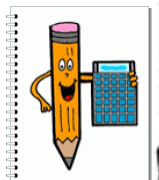
Model (6)

1- Complete:

- a) The rectangle is a parallelogram with
- b) If $a:b = 2:3$, $b:c = 3:5$ then $a:c = \dots : \dots$
- c) The ratio between the circumference of the circle and its diameter = ...
- d) If $\frac{x+12}{6} = 4$ then $X = \dots$
- e) If the length in drawing is 2.5 cm and the real length is 1.6 m then the drawing scale is :
- f) If the volume of a cuboid = 100 cm^3 and its base area = 100 cm^2 then its height =

2- Choose the correct answer:

- a) If one of the angles of the parallelogram is right and two of its adjacent sides are equal in length ,then it is called
(Rhombus – square – rectangle – triangle)
- b) If the numbers 4 , X , 12 , 18 are proportional, then the value of X=
(2 – 3 – 6 – 45)
- c) A cube with volume 125 cm^3 ,then its base area is
(25 cm^2 - 25 cm – 5 cm^2 - 5 cm)
- d) A plough for agricultural land plough 14 feddans within 3.5 hours ,then the rate of this plough = feddans / hour
($\frac{1}{2}$ - 4 – 8 – 49)
- e) Rectangle it's length 6 cm and area 24 cm^2 then the ratio between the perimeter and its length is :
(4:1 – 10:3 – 12:5 – 3:2)





Math

6th prim

3- a) If the ratio among the prices of three electrical sets (TV – oven – fridge) is 4:5:8 and the price of the TV st is L.E 1200 calculate the price of the oven and the fridge

b) A cube –shaped vessel ,of inner edge length 20 cm was filled of honey, Find :

a- Its capacity

b- If the price of one liter is L.E 8 find the price of honey

4- a) The height of a minaret is 22m and the length of its shadow in a moment equals 6 m , whats the height of a house infront of this minaret if the length of its shadow equal 3 m in the same moment

b) A car dealer bough a car for 45000 pounds and spent 5000 pounds to repair it , then he sold it for profit 10% ,Find the selling price

5- a) A glass vessel is cuboid shape its inner edge length is 30 cm this vessel contain an amount of water ,if we throw a metallic piece in it then the water level raised 5 cm because of that find the volume of metallic piece

b) In the opposite figure :

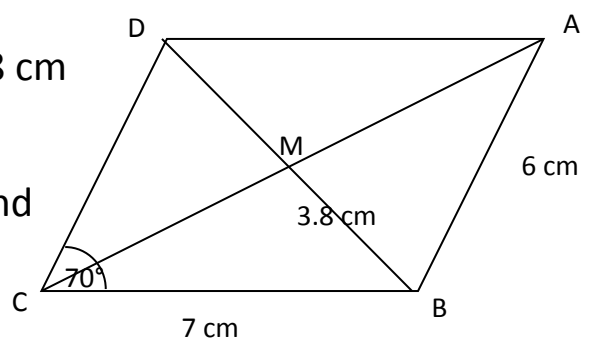
ABCD is a parallelogram AB=7 cm , BM 3.8 cm

BC= 7cm and $m(\angle BCD)=70^\circ$

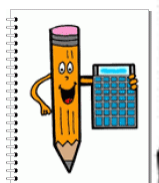
Without using geometrical instruments find

a- $m(\angle ADC)$

b- The perimeter of the triangle BCD



6-a) A picture of habitation edifices is taken with a drawing scale 1:100000 , If the real distance between two cities is 36 km find the distance between them on the map





Math

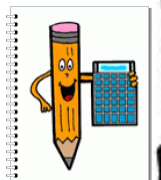
6th prim

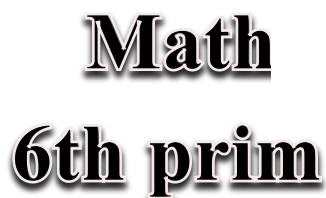
b) The following table shows the numbers of hours which are spent by 60 pupils to study their lessons daily :-

Number of hours	1-	2-	3-	4-	5-6	Total
Number of pupils	9	13	18	12	8	60

a- Represent this data by the frequency curve

b- what is the percentage of the greatest number of pupils to study their lessons daily





Model Answer (1)

(1)	1 st angle :	2 nd angle :	3 rd angle :	sum
	2 :	3 :	4 :	9
			:	180

$$1^{\text{st}} \text{ angle} = \frac{2 \times 180}{9} = 40^\circ$$

$$\text{2nd angle} = \frac{3 \times 180}{9} = 60^\circ$$

$$3^{\text{rd}} \text{ angle} = \frac{4 \times 180}{9} = 80^\circ$$

The angles are : 40° , 60° , 80°

2- The rate of what he drinks daily = $\frac{21 \text{ cups}}{7 \text{ days}} = 3 \text{ glasses / day}$

3- volume of cube = $40 \times 40 \times 40 = 64000 \text{ cm}^3$

$$\text{H of cuboid} = \frac{V}{B.A} = \frac{64000}{2000} = 32\text{cm.}$$

$$4-5 \text{ km} \times 100000 = 500000 \text{ cm}$$

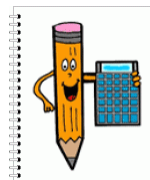
$$\text{D.L} = \frac{\frac{1}{2} \times 1}{500000} = \frac{1 \times 100000}{1000000} \text{ km}$$

D.L : R.L

$$= \frac{1}{10} \text{ cm} = 0.1 \text{ cm}$$

1 : 500000

$$: \quad \frac{1}{2} \text{ km}$$





Math

6th prim

5- C.P : profit : S.P

100% : 15% : 115%

Q2 : children : adults : sum

2 : 3 : 5

? : ? : 8000

Pieces of children in one day = $\frac{2 \times 8000}{5} = 3200 \text{ pices}$

The factory produces in 3 day = $3200 \times 3 = 9600 \text{ pieces.}$

Q3 : a) $x - 3 = \frac{2 \times 5}{3} = 3.33$

$$x = 3.33 + 3 = 6.33$$

b) befor discount : discount : after discount

100% : 15% : 85%

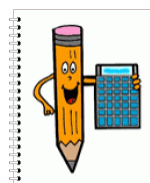
1750 L.E : : ?

The price after discount = $\frac{1750 \times 85}{100} = 1487.5 \text{ L. E}$

Q4 : v.of cuboid = $45 \times 40 \times 15 = 27000 \text{ cm}^2$

v. of cube = $30 \times 30 \times 30 = 27000 \text{ cm}^3$

Both of the boxes are suitable.





Math

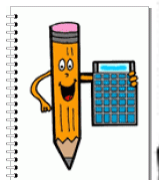
6th prim

Q5: B) The number of trips before 10 am = $30 + 41 = 71$ trips.

C) The percentage = $\frac{40}{140} \times 100 = 28.57\%$

Sets	Center of the set	Frequency	Point
6 am	$\frac{6+8}{2} = 7$	30	(7 , 30)
8 am	$\frac{8+10}{2} = 9$	41	(9 , 41)
10 am	$\frac{10+12}{2} = 11$	40	(11 , 40)
12 am	$\frac{12+14}{2} = 13$	16	(13 , 16)
2 pm	$\frac{14+16}{2} = 15$	13	(15 , 13)

Draw by yourself





Math

6th prim

Model Answer (2)

(1) a)

Gm	100	30
calories	300	X ?

$$x = \frac{30 \times 300}{100} = 90 \text{ calories}$$

b) $E = \sqrt{FA} = \sqrt{4} = 2cm$

$$V = E \times E \times E = 2 \times 2 \times 2 = 8cm^3$$

c) $1 \text{ liter} = \times 100 = 100 \text{ cm}^3$ $1 \text{ liter} = \times 1000 = 1000 \text{ cm}^3$

$$V. \text{ of liquid} = 1000cm^3$$

$$E = \sqrt[3]{V} = \sqrt[3]{1000} = 10cm$$

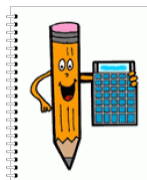
d) $\frac{1}{4}$

e) $12 \text{ kirats} : 1\frac{1}{2} \text{ feddons}$

$$12 \text{ kirats} : 36 \text{ kirats} \quad (\div 12)$$

$$1 : 3$$

f) $\text{Range} = \text{max value} - \text{min value} = 9 - 3 = 6$





Math

6th prim

Q2 : a) $2L = 2000 \text{ cm}^3$

Number of bottles = $\frac{2000}{40} = 50 \text{ bottles}$

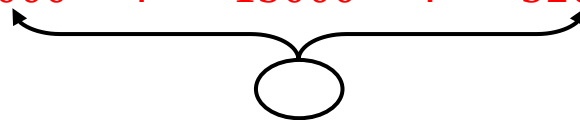
b) The weight of the pure gold = $70 - 7 = 63 \text{ gm}$

The percentage of the pure gold = $\frac{63}{70} \times 100 = 90 \%$

Q3 : C.P : loss : s.p

100% : ? :

65000 : 13000 : 52000

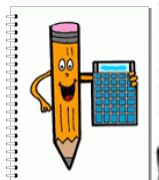


Percentage of loss = $\frac{100 \times 13000}{65000} = 20\%$

Q4: volume of cube = $36 \times 36 \times 36 = 46656 \text{ cm}^3$

Volume of soapbar = $9 \times 9 \times 9 = 729 \text{ cm}^3$

Namber opf soapbars = $\frac{46656}{729} = 64 \text{ soap bars}$





Math

6th prim

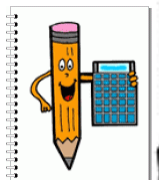
Q5:

Sets	Center of the set	Frequency	Point
10 -	$\frac{10+20}{2} = 15$	3	(15 , 3)
20 -	$\frac{20+30}{2} = 25$	6	(25 , 6)
30-	$\frac{30+40}{2} = 35$	10	(35 , 10)
40-	$\frac{40+50}{2} = 45$	15	(45 , 15)
50-	$\frac{50+60}{2} = 55$	8	(55 , 8)
60-	$\frac{60+70}{2} = 65$	5	(65 , 5)
70-80	$\frac{70+80}{2} = 75$	3	(75 , 3)

Draw by yourself

Second: The no of workers = $10 + 15 = 25$ workers

The percentage of workers = $\frac{25}{50} \times 100 = 50 \%$





Math

6th prim

Model Answer (3)

1) $a \times d = b \times c$

2) $E = \frac{144}{12} = 12cm$

$V = 12 \times 12 \times 12 = 1728 cm^3$

3) The shade = $\frac{180 \times 2}{3} = 120 cm$

Height	3 m	2m
Shade	180 cm	×

4) after 5.5 hours he uses = $\frac{2.5 \times 5.5}{2} = 13.75 liters$

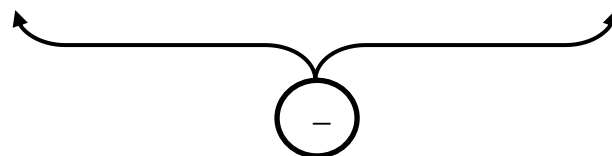
The paint reamained = $25 - 13.75 = 11.25 liters$

Liter	2.5	×
Hours	1	5.5

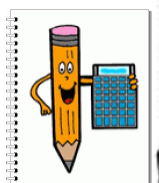
5) Befor discount : discount : after discount

100% : ? :

240 L.E : 60 : 180 L.E



Percentage of discount = $\frac{60 \times 100}{240} = 25\%$





Math

6th prim

Q2: a) $D.L = \frac{1 \times 5}{1000} = \frac{1}{200} \times 100000 \text{ km} = 500 \text{ cm}$. D.L : R.L

1 : 1000

? : 5km

b) 1st : 2nd : 3rd
60000 : 80000 : 90000 (÷ 10000)
6 : 8 : 9

1st : 2nd : 3rd : sum

6 : 8 : 9 : 23

20700

- The share of 1st = $\frac{6 \times 20700}{23} = 5400 \text{ L.E}$
- The share of 1st = $\frac{8 \times 20700}{23} = 7200 \text{ L.E}$
- The share of 1st = $\frac{9 \times 20700}{23} = 8100 \text{ L.E}$

Q3:

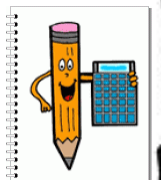
a) m ($\angle D$) = 100°

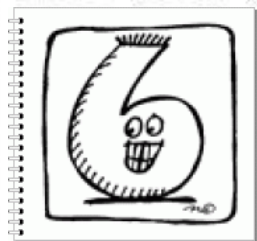
M ($\angle ACD$) = $180 - (100 + 35) = 45^\circ$

b) Boys : girl : sum

2 : 3 : 5

? : 800





Math

6th prim

The number of girls = $\frac{3 \times 800}{5} = 480$ girls

The number of succeeded girls = $480 \times \frac{85}{100} = 408$ girls

Q4: First: V of the vessel = $E \times E \times E = 10.5 \times 10.5 \times 10.5$
 $= 1157.625 \text{ cm}^3$

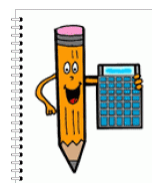
Second: $1157.625 \times 1000 \text{ cm}^3 = 1157625 \text{ mm}^3$

Q5: b) The number of cities = $5 + 2 = 7$ cities

Q5: a)

Sets	Center of the set	Frequency	Point
24 -	$\frac{24+28}{2} = 26$	3	(26 , 3)
28 -	$\frac{28+32}{2} = 30$	4	(30 , 4)
32-	$\frac{32+36}{2} = 34$	7	(34 , 7)
36-	$\frac{36+40}{2} = 38$	9	(38 , 9)
40-	$\frac{40+44}{2} = 42$	5	(42 , 5)
44-	$\frac{44+48}{2} = 46$	2	(46 , 2)

Draw by yourself





Math

6th prim

Model answer 4

1.comple:

a) $5000 : 3000 \div 1000$ ($5 \text{ kg} \times 1000 = 5000 \text{ gm}$)

$5 : 3$

b) $1.45 \text{ L} + 0.5 \text{ dm}^3 + 0.05 \text{ L} = 2\text{L}$ ($50 \text{ cm}^3 \div 1000 = 0.05 \text{ L}$)

c)

$A : B : C$

$2 : 3 : 3$

$6 : 6 : 7$

$12 : 18 : 21 \div 3$

$4 : 6 : 7$

$a : c = 4 : 7$

d) volume of cuboid = $s \times s \times h = 6 \times 6 \times 10 = 360 \text{ cm}^3$ $L = W = s$

e) $(\frac{9}{20} \times 100)\% = 45\%$

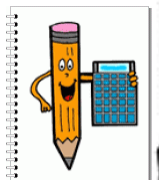
2.choose:

a) $\frac{2}{3} : \frac{10}{3}$

$6 : 30$

$1 : 5$

b) Square and rhombus





Math

6th prim

c) $a \times d = c \times b$

d) The rate = $15 \div 10 = \frac{3}{2}$ feddan /hr

$E = \frac{\text{sum of edges}}{12} = \frac{144}{12} = 12 \text{ cm}$

$V = E \times E \times E = 12 \times 12 \times 12 = 1728 \text{ cm}^3$

Q3.a. D.L : R.L

1 : 9 000 000

X : 180

$X = \frac{180 \times 1}{9\,000\,000} = \frac{1}{50\,000} \text{ km} \times 100\,000 = 2 \text{ cm}$

b)

$X = \frac{540 \times 20}{180} = 60 \text{ L}$

Liter	20	X
Km.	180	540

Q4.a.

a) $m(\angle D) = 110^\circ$ (opposite angles)

b) $m(\angle BAC) = 180 - (110 + 30) = 40^\circ$ (consecutive angles)

c) $m(\angle ACD) = 180 - (110 + 30) = 40^\circ$

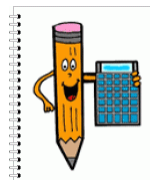
d) The perimeter = $(L + W) \times 2 = (7 + 4) \times 2 = 22 \text{ cm}$

b) $P_1 : P_2$: difference

3 : 5 : 2

_ : _ : 30

$P_1 = \frac{30 \times 3}{2} = 45 \text{ L.E} , P_2 = \frac{30 \times 5}{2} = 75 \text{ L.E}$





Math

6th prim

Q5.a)

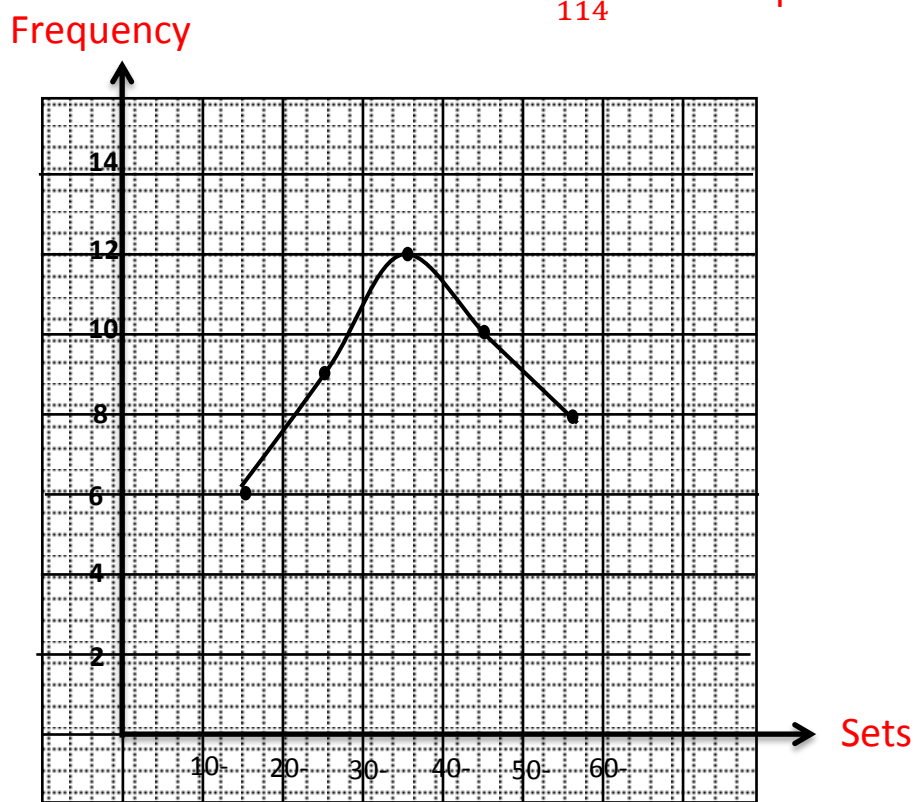
C.P : Profit : S.P

100% : 14% : 114%

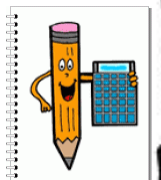
_ : _ : 1026

$$C.P = \frac{1026 \times 100}{114} = 900 \text{ pounds}$$

b)



The number of visitors = 6+9+12=27 visitor





Math

6th prim

Model answer 5

Q1. Complete:

a) $4 : 1$

b) $18 \text{ kirat} : 48 \text{ kirat} \div 3$ ($2 \text{ feddan} \times 24 = 48 \text{ kirats}$)

$6 : 16 \div 2$

$3 : 8$

c) $1500 \text{ cm}^3 \div 1000 = 1.5 \text{ L}$

d) The greatest number = 24 , the smallest number = 3

Range = greatest – smallest = $24 - 3 = 21$

e) Squar – rectangle

Q2.choose :

a) $A_1 : A_2 : A_3$:Sum

$1 : 2 : 3 : 6$

$- : - : - : 180$

$$A_1 = \frac{180 \times 1}{6} = 30^0, A_2 = \frac{180 \times 2}{6} = 60^0$$

$$A_3 = \frac{180 \times 3}{6} = 90^0, \text{ then the smallest angle is } 30^0$$

b) $A : b = 2 : 5$ then $\frac{2}{2+5} = 2 : 7$

c) 7×9

d) Age

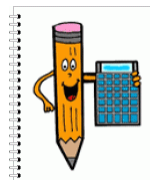
e) D.L : R.L

$2 \text{ cm} : 6 \text{ m}$

($6 \text{ m} \times 100 = 600 \text{ cm}$)

$2 : 600 \div 2$

$1 : 300$





Math

6th prim

Q3.a volume of cube = $E \times E \times E = 12 \times 12 \times 12 = 1728 \text{ cm}^3$

Volume of ingots = $L \times W \times H = 3 \times 4 \times 6 = 72 \text{ cm}^3$

The number of ingots = $\frac{\text{big volume}}{\text{small volume}} = \frac{1728}{72} = 24 \text{ ingots}$

Q3.b) $1^{\text{st}} : 2^{\text{nd}} : 3^{\text{rd}} : \text{sum}$

$42\% : 28\% : - : 100\%$

$- : - : 36000 : -$

The profit of the $3^{\text{rd}} = 100\% - (42\% + 28\%) = 30\%$

The total profit = $\frac{36000 \times 100}{30} = 120\,000 \text{ pounds}$

Q4.a) $L : W : \text{Perimeter}$

$7 : 4 : 22$ $(4 + 7) \times 2 = 22 \text{ cm}$

$- : - : 44$

$L = \frac{44 \times 7}{22} = 14 \text{ m}$, $W = \frac{44 \times 4}{22} = 8 \text{ m}$, Area = $L \times W = 14 \times 8 = 112 \text{ m}^2$

Q4.b) $6 \text{ feddan} \times 24 = 144 \text{ kirats}$, $3 \text{ hours} \times 60 = 180 \text{ min.}$

First tractor = $144 \div 180 = 0.8 \text{ kirats / min.}$

Second tractor = $6 \div 10 = 0.6 \text{ kirats / min.}$

The first tractor is the better

Q5.a) $1^{\text{st}} : 2^{\text{nd}} : 3^{\text{rd}}$

$5 : 3 : 3$
 $4 : 4 : 3$

$1^{\text{st}} : 2^{\text{nd}} : 3^{\text{rd}} : \text{difference}$

$20 : 12 : 9 : 11$
 $- : - : - : 8250$

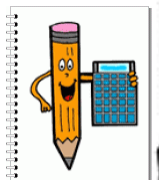
$20 : 12 : 9$

$1^{\text{st}} = \frac{20 \times 8250}{11} = 15000 \text{ pounds}$

$2^{\text{nd}} = \frac{12 \times 8250}{11} = 9000 \text{ pounds}$

$3^{\text{rd}} = \frac{9 \times 8250}{11} = 6750 \text{ pounds}$

Mid-year

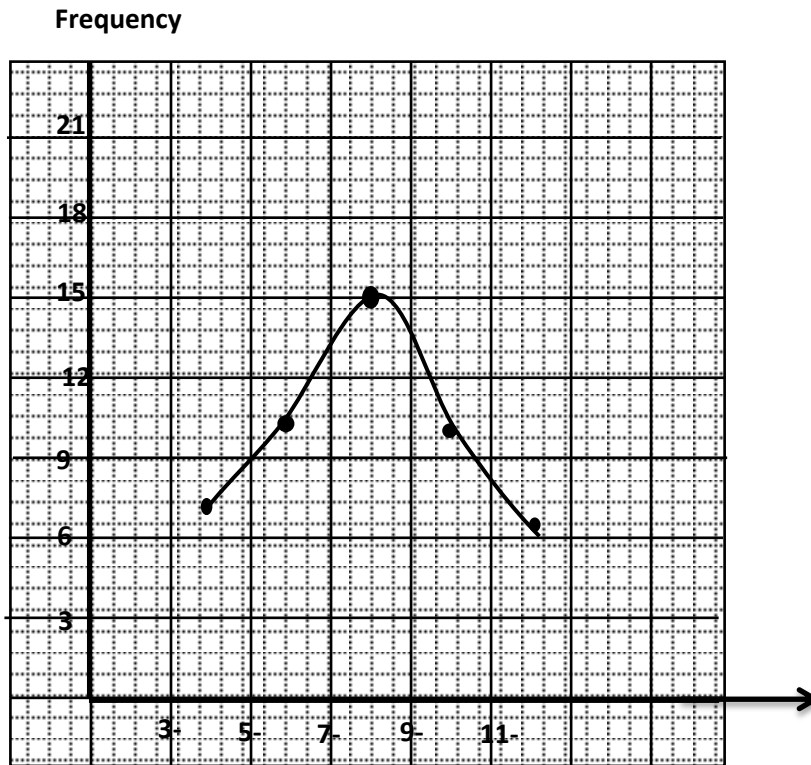




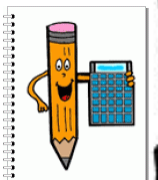
Math

6th prim

Q5.b)



Number of students = $15 + 10 + 8 = 33$ student





Math

6th prim

Model answer 6

Q1 complete:

a) right angle

b) $A : b : c$

$2 : 3 \rightarrow 3$

$3 \leftarrow 3 : 5$

$6 : 9 : 15 (\div 3) \longrightarrow a : c =$

$2 : 3 : 5$

$a : c = 2 : 5$

c) $\pi : 1$

d) $X + 12 = 4 \times 6 = 24$

$X = 24 - 12 = 12$

e) D.L : R.L

$2.5 \text{ cm} : 1.6 \text{ m} \quad (1.6 \text{ m} \times 100 = 160 \text{ cm})$

$2.5 : 160 \quad (\times 10)$

$25 : 1600 \quad (\div 25)$

$1 : 64$

f) Height = $\frac{\text{volume}}{B A} = \frac{1000}{100} = 10 \text{ cm}$

Q2. choose:

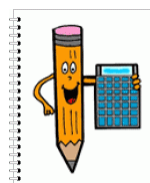
a) Square

b) $\frac{4}{x} = \frac{12}{18}$

$X = \frac{4 \times 18}{12} = 6$

c) $E = \sqrt[3]{V} = \sqrt[3]{125} = 5 \text{ cm}$

$B A = E \times E = 5 \times 5 = 25 \text{ cm}^2$





Math

6th prim

d) The rate = $14 \div 3.5 = 4$ feddan /hr

e) $W = A \div L = 24 \div 6 = 4$ cm

$$P. = (L + W) \times 2 = (4 + 6) \times 2 = 20 \text{ cm}$$

$$P : L$$

$$20 : 6 \quad (\div 2)$$

$$10 : 3$$

Q3.a) T.v : oven : fridge

$$4 : 5 : 8$$

$$1200 : _ : _$$

$$\text{the price of oven} = \frac{5 \times 1200}{4} = 1500 \text{ pounds}$$

$$\text{the price of fridge} = \frac{8 \times 1200}{4} = 2400 \text{ pounds}$$

Q3.b)

a) Capacity = $20 \times 20 \times 20 = 8000 \text{ cm}^3 \div 1000 = 8$ Litre

b) The price of honey = $8 \times 8 = 64$ pounds

Q4.a)

$$X = \frac{3 \times 22}{6} = 11 \text{ m}$$

Height	22 m	X
shadow	6 m	3 m

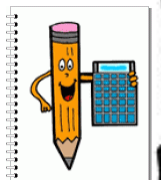
Q4.b) c.p = $45\,000 + 5\,000 = 50\,000$ pounds

$$\text{c.p} : \text{profit} : \text{s.p}$$

$$100 : 10 : 110$$

$$50\,000 : \quad : X$$

$$\text{s.p} = \frac{110 \times 50\,000}{100} = 55\,000 \text{ pounds}$$





Math

6th prim

Q5.a) volume of the metallic piece = $30 \times 30 \times 5 = 4500 \text{ cm}^3$

Q5.b)

a) $M(<ADC) = 180 - 70 = 110^\circ$

b) Perimeter = $7 + 6 + 3.8 + 3.8 = 20.6 \text{ cm}$

Q6.a)

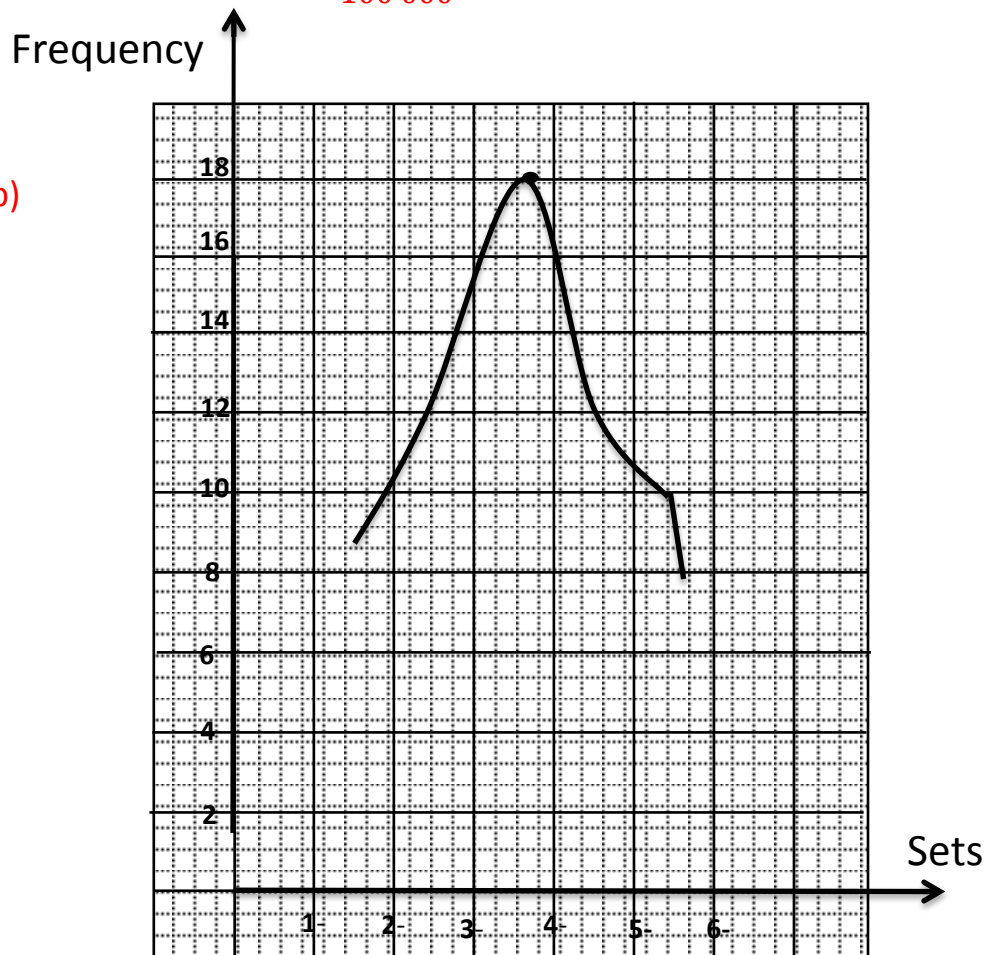
D.L : R.L

1 : 100 000

— : 36

$$\text{D.L} = \frac{36 \times 1}{100\,000} = 0.00036 \text{ km} \times 100\,000 = 36 \text{ cm}$$

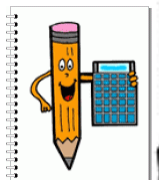
b)



The percentage = $\frac{18}{60} \times 100 = 30\%$

Good Luck

Mid-year





Math 6 th _ prim

Test (1)

Answer the following questions:

1. Complete each of the following statements:

- a) The ratio between 250 gm and $\frac{1}{8}$ kg = : " in the simplest form"
- b) $\frac{3}{4}$ =%
- c) If the numbers 3 , 5 , 9 and x were proportional, then x =
- d) The two diagonals are perpendicular in ,

2. Choose the correct answer:

- a) If the drawing length = 2cm and the real length = 20 meters

Then the drawing scale equals

((1 : 10 or 1: 100 or 1 : 1000 or 1 : 10000))

- b) If the marks of 6 pupils in one of tests are 49,36,40,57,33 and 29 then

the range of these = marks = ((4,13,28,20))

- c) $6500 \text{ dm}^3 = \dots\dots\dots \text{m}^3$ ((6.5 or 65 or 650 or 6500 000))

- d) A cube with a base perimeter = 36cm, then its volume = cm^3

((36 or 6 or 729 or 216))

3.

- a) A company at the electrical appliances displays the TV set for 1026 panels if the company sold it with profit percentage 14%. Find the cost price for the TV set.





Math 6 th _ prim

b) In the opposite figure:

ABCD is a parallelogram which:

$m(\angle A) = 60^\circ$, $m(\angle DBC) = 45^\circ$

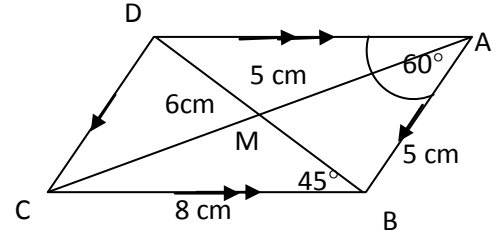
AM = 5cm, BC = 8cm find

1) AD =

2) AC =

3) $m(\angle ADC) = \dots\dots\dots$

4) $m(\angle ABD) = \dots\dots\dots$



4.
a) Apices of building land is distributed between two brothers in the ratio 7 : 5 if

the share of the first one exceed the share at the second by 80 square metre, find:

the area of the land and the share of each other first and the second.

b) A metallic cuboid of dimensions 8,18 and 24cm it was melted and converted it into ingots in ingots in the shape of cubes with each edge length 6cm.Calculate the number of ingots.

5.
a) A factory produce 9000 bottles of soft drink in 12 hours?
What is the rate of production per now?
b) The following table shows the marks of 100 students in one month in month:

Mark	20-	30-	40-	50-	Sum
Number of student	15	30	40	15	100

- 1) What is the number of students who record less than 40 marks
- 2) Draw the frequency curve for this distribution.





Math 6 th - prim

Test (2)

1. Complete :

- a) The ratio between $3\frac{1}{5} : 9.6 = \dots\dots\dots : \dots\dots\dots$
- b) If $\frac{x+2}{8} = \frac{3}{4}$ then $X = \dots\dots\dots$
- c) If the drawing length = 6cm, and Real length = 36m then the drawing scale is $\dots\dots\dots$
- d) A cube the perimeter of its base is 36cm then its Volume is $\dots\dots\dots\text{cm}^3$
- e) If $A : B = 2 : 3$, $A : C = 4 : 5$ then $B : C = \dots\dots\dots : \dots\dots\dots$

2. Choose :

- a) The two diagonals are equal and perpendicular in $\dots\dots\dots$
(rectangle , square , parallelogram
rhombus)
- b) $4\text{m}^3 = \dots\dots\dots\text{dm}^3$ (4000 , 400 , 40 , 4)
- c) The following data is descriptive except $\dots\dots\dots$
(favorite color , birth place , age , blood species)
- d) The ratio between the perimeter of the square and its side length is $\dots\dots\dots$
(1 : 4 , 4 : 1 , 2 : π , $\pi : 1$)
- e) $10\% + \frac{9}{20} = \dots\dots\dots\%$ (35 , 45 , 55 , 65)





Math 6 th _ prim

- 3.
- a) A house its height 18m and the length of its shade at the moment is 4m , How many the height of another tree. Its shade length at the same moment 3m.
- b) Hazim bought a car in 35000 pound then he append 15000 pound to repair it then he sold it by 55000 pound. Find the percentage of the profit?
- 4.
- a) A box of Carton in a cuboid shape its inner dimensions 40 , 50 , 30 cm , How many blocks of soap we can fill the box if the dimensions of the each block soap is 8 , 5 , 3cm
- b) A cube its inner edge is 20cm fill with honey if the price of one litre of honey is 8 pound. Find the price of all honey.





Math 6 th _ prim

5. a) In the opposite figure

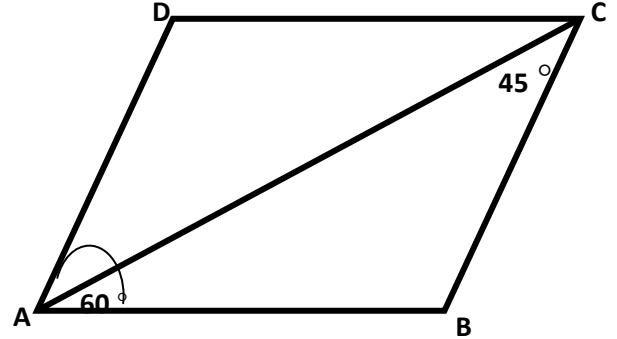
ABCD is parallelogram

$m(\angle BAD) = 60^\circ$, $m(\angle ACB) = 45^\circ$

Find:

1) $m(\angle ABC) = \dots\dots\dots$

2) $m(\angle ACD) = \dots\dots\dots$



b) On the orphan day a group of students donated amounts of money in pounds shown in the following table.

Many in pounds	50-	60-	70-	80-	90-	100-	Total
Number of students	10	20	40	60	50	20	200

Draw the frequency curve.





Math 6 th _ prim

Test (3)

1. choose the correct answer from the given ones:

- a) $\frac{1}{2}$ day : 18 hour = : (3 : 2 or 4 : 3 or 2 : 3 or 1 : 9)
- b) $\frac{9}{20} = \text{.....}\%$ (40 or 45 or 60 or 90)
- c) If the drawing length = 2cm and the real length = 20m , then the drawing scale equals (1 : 10 , 1 : 100 , 1 : 1000 , 1 : 10 000)
- d) The volume of cuboid whose dimensions are 2cm,3cm,5cm =cm³ (10 or 25 or 30 or 50)
- e) If the length of rectangle is 6cm and its area is 24cm² , then the ratio between its perimeter and its length is (4 : 1 or 3 : 2 or 12 : 5 or 10 : 3)

2. Complete each of the following :

- a) $\frac{2}{5} = \frac{\text{.....}}{20}$
- b) 12 kirats : 2 feddans = :
- c) The volume of a cube whose base area is 9cm² equalscm³
- d) If $a : b = 2 : 3$, $b : c = 3 : 5$ then $a : c = \text{.....} : \text{.....}$
- e) If the marks of 5 pupils in one of the tests are 29 , 33 , 59 , 40 , 36 then the range for this marks is equal to

3.

- a) The ratio among the measurements of angles in a triangle is 2 : 3 : 4 find the measure of each angle in this triangle.





Math 6 th - prim

- b) A picture of a natural scene is drawn with drawing scale 1 : 100 if the real length of a tree is 8 metre. Find its length in the picture.

4.

- a) A bottle of milk of capacity 2 litres is needed to be distributed into small bottles the capacity of each of them 200 milliliters. Find the number of small bottles.

- b) In the opposite figure

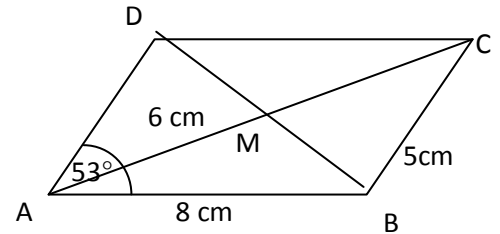
ABCD is a parallelogram in which

$AB = 8\text{cm}$, $BC = 5\text{cm}$, $AM = 6\text{cm}$

$m(\angle A) = 53^\circ$, without using geometrical instruments Find

1) $m(\angle ABC)$

2) the perimeter of the triangle ADC



5.

- a) A father distributed 9000 pounds among his three sons if the share of the first was third of the money and the ratio between the share of the second and the third is equals 2 : 3 calculate the share of each of them.

- b) The following table shows the marks of 40 students in one of math exam.

Marks	10-	20-	30-	40-	Sum
Number of students	5	12	17	6	40

- 1) What is the number of students whose records less than 30 marks.
2) Draw the frequency curve for this distribution.





Math 6 th - prim

Answer

Model answer (1)

Q1)

$$a) \rightarrow 250 \text{ gm} : \frac{1}{8} \text{ kg} \rightarrow \frac{1}{8} \text{ kg} \times 1000 = 125 \text{ gm}$$

$$250 \text{ gm} : 125 \text{ gm} \div 125$$

$$2 : 1$$

$$b) \frac{3}{4} \times 100\% = 75\%$$

$$c) \frac{3}{5} = \frac{9}{x} \rightarrow x = \frac{5 \times 9}{3} = 15$$

d) rhombus , square

Q2)

a) DL : RL

$$2\text{cm} : 20\text{m} \rightarrow 20 \text{ m} \times 100 = 2000\text{cm}$$

$$2\text{cm} : 2000\text{cm} \div 2$$

$$1 : 1000$$

$$b) \text{Range} = \text{max} - \text{min} = 57 - 29 = 28$$

$$c) 6500 \text{ dm}^3 \div 1000 = 6.5 \text{ m}^3$$

$$d) E = \frac{P}{4} = \frac{36}{4} = 9\text{cm}$$

$$V = 9 \times 9 \times 9 = 729 \text{ cm}^3$$

Mid year

(8)





Math 6 th - prim

Q3)

a) CP : profit : SP

$$100 : 14 : 114$$

$$: 1026$$

$$\text{Cost price} = \frac{1026 \times 100}{114} = 900 \text{ pounds}$$

b)

$$1- \overline{AD} = \overline{BC} = 8\text{cm}$$

$$2- \overline{AC} = 2 \text{ Am} = 2 \times 5 = 10\text{cm}$$

$$3- m(\angle ADC) = 180^\circ - 60^\circ = 120^\circ$$

$$4- M(\angle ABD) = 180^\circ - (60^\circ + 45^\circ) = 75^\circ$$

Q4)

a) first : second : diff

$$7 : 5 : 2$$

$$80$$

$$\text{The share of the first} = \frac{7 \times 80}{2} = 280 \text{ m}^2$$

$$\text{The share of the second} = \frac{5 \times 80}{2} = 200 \text{ m}^2$$

$$\text{The area} = 280 + 200 = 480 \text{ m}^2$$

$$\text{b) V of the cuboid} = 8 \times 18 \times 240 = 3456 \text{ cm}^3$$

$$\text{V of the ingot} = 6 \times 6 \times 6 = 216 \text{ cm}^3$$

$$\text{The numbers of ingots} = \frac{3456}{216} = 16 \text{ ingot}$$





Math 6 th - prim

Q5)

a) The rate = $\frac{9000}{12} = 750$ bottles / hours

b)

Sets	Center of sets	Frequency	Points
20	25	15	(25,15)
30-	35	30	(35,30)
40-	45	40	(45,40)
50-	55	15	(55,15)
Total 100			

a) Draw by your self

b) 45 students.





Math 6 th - prim

Model answer (2)

1. Complete :

a) 1 : 3

b) 4

c) 1 : 600

d) 729

e) 6 :

5

2. Choose :

a) Square

b) 4000

c) age

d) 4 : 1

e)

55%

3.

a) height : shade

18 : 4

? : 3

The height of tree = $\frac{3 \times 18}{4} = 13.5 \text{ m}$

b) The cost = 35000 + 15000 = 50 000 pounds

The profit = 55000 – 50 000 = 5000 pounds

Then, percentage of profit = $\frac{5000}{50\ 000} \times 100 = 10\%$

4.

a) The number of blocks = $\frac{\text{the volume of cuboid}}{\text{the volume of one block}}$
 $= \frac{40 \times 50 \times 30}{8 \times 5 \times 3} = 500 \text{ block}$





Math 6 th _ prim

b) The volume of the cube = $20 \times 20 \times 20 = 8000 \text{ cm}^3$ ($\div 1000$)
= 8 liter

The price of honey = $8 \times 8 = 64 \text{ L.E.}$

5-

a) $-m(\widehat{ABC}) = 180^\circ - 60^\circ = 120^\circ$ (adjacent angles)

$-m(\widehat{ACD}) = 60^\circ - 45^\circ = 15^\circ$





Math 6 th _ prim

Model answer (3)

1. Choose :

a) 2 : 3

b) 45%

c) 1 : 1000

d) 30cm^3

e) 10

: 3

2. Complete :

a) 8

b) 1:4

c) 27cm^3

d) 2:5

e) 30

3.

a) 1st : 2nd : 3rd : sum

2 : 3 : 4 : 9

? : ? : ? : 180

$$1^{\text{st}} \text{ angles} = \frac{180 \times 2}{9} = 40^\circ$$

$$2^{\text{nd}} \text{ angle} = \frac{180 \times 3}{9} = 90^\circ$$

$$3^{\text{rd}} \text{ angle} = \frac{180 \times 4}{9} = 80^\circ$$





Math 6 th - prim

b) D.L : R.L

1 : 100

? : 8m

$$D.L = \frac{8 \times 1}{100} = 0.08m = 80 \text{ cm}$$

4.

a) The 2 litre = 2000mL

$$\text{the number of bottles} = \frac{2000}{200} = 10 \text{ bottle}$$

b)

$$1) m(\angle ABC) = 180 - 53 = 127^\circ \text{ (adjacent angles)}$$

$$2) \text{ the perimeter of the triangle ACD} = 5 + 8 + 12 = 25\text{cm}$$

5.

a) The share of the first = $\frac{1}{3} \times 9000 = 3000$ pounds

$$\text{The rest} = 9000 - 3000 = 6000 \text{ pound}$$

2nd : 3rd : sum

2 : 3 : 5

? : ? : 6000

$$\text{The share of the second} = \frac{6000 \times 2}{5} = 2400 \text{ pounds}$$

$$\text{The share of the third} = \frac{6000 \times 3}{5} = 3600 \text{ pounds}$$





Math 6 th _ prim

b)

Sels	The center	Frequency	point
10-	15	5	(15.5)
20-	25	12	(25,12)
30-	35	17	(35,17)
40-	45	6	(45,6)

1) Draw by your self

2) The number of students = $12+5 = 17$ student



Model (1)

1- Complete:

- a) The rectangle is a parallelogram with
- b) If $a:b = 2:3$, $b:c = 3:5$ then $a:c = \dots : \dots$
- c) The ratio between the circumference of the circle and its diameter = ...
- d) If $\frac{x+12}{6} = 4$ then $X = \dots$
- e) If the length in drawing is 2.5 cm and the real length is 1.6 m then the drawing scale is :
- f) If the volume of a cuboid = 1000 cm^3 and its base area = 100 cm^2 then its height =

2- Choose the correct answer:

- a) If one of the angles of the parallelogram is right and two of its adjacent sides are equal in length ,then it is called
(Rhombus – square – rectangle – triangle)
- b) If the numbers 4 , X , 12 , 18 are proportional, then the value of X=
(2 – 3 – 6 – 45)
- c) A cube with volume 125 cm^3 ,then its base area is
(25 cm^2 - 25 cm – 5 cm^2 - 5 cm)
- d) A plough for agricultural land plough 14 feddans within 3.5 hours ,then the rate of this plough = feddans / hour
($\frac{1}{2}$ – 4 – 8 – 49)
- e) Rectangle it's length 6 cm and area 24 cm^2 then the ratio between the perimeter and its length is :
(4:1 – 10:3 – 12:5 – 3:2)

- 3- a)** If the ratio among the prices of three electrical sets (TV – oven – fridge) is 4:5:8 and the price of the TV set is L.E 1200 calculate the price of the oven and the fridge

b) A cube –shaped vessel ,of inner edge length 20 cm was filled of honey, Find :

a- Its capacity

b- If the price of one liter is L.E 8 find the price of honey

4- a) The height of a minaret is 22m and the length of its shadow in a moment equals 6 m , what's the height of a house in front of this minaret if the length of its shadow equal 3 m in the same moment

b) A car dealer bough a car for 45000 pounds and spent 5000 pounds to repair it , then he sold it for profit 10% ,Find the selling price

5- a) A glass vessel is cuboid shape its inner edge length is 30 cm this vessel contain an amount of water ,if we throw a metallic piece in it then the water level raised 5 cm because of that find the volume of metallic piece

b) In the opposite figure :

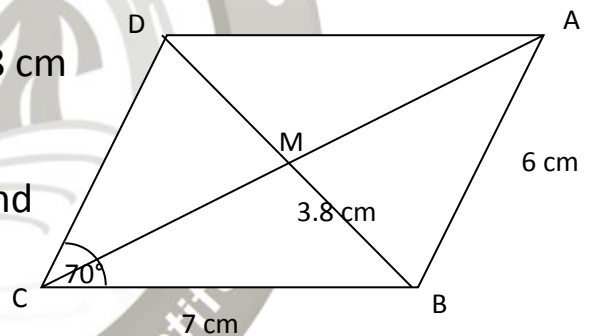
ABCD is a parallelogram $AB=7$ cm , $BM=3.8$ cm

$BC=7$ cm and $m(\angle BCD)=70^\circ$

Without using geometrical instruments find

a- $m(\angle ADC)$

b- The perimeter of the triangle BCD



6-a) A picture of habitation edifices is taken with a drawing scale 1:100000 , If the real distance between two cities is 36 km find the distance between them on the map

b) The following table shows the numbers of hours which are spent by 60 pupils to study their lessons daily :-

Number of hours	1-	2-	3-	4-	5-6	Total
Number of pupils	9	13	18	12	8	60

a- Represent this data by the frequency curve

b- What is the percentage of the greatest number of pupils to study their lessons daily



Model (2)

Q1 : Choose the correct answer :

- a) If 100 gm of food give 300 calories , then the number of calories which are found in 30 gm of the same food equals
- a) 90 calories b) 100 calories
- c) 900 calories d) 1000 calories
- b) If the areas of a face of a cube = 4cm^2 then its volume in cm^3 is
- a) 6 b) 8 c) 24 d) 64
- c) A liquid is put in a glass basin in the form of a cube to be filled completely , if the capacity of the basin is one litre then the inner edge length of the basin in cm =
- a) 0.1 b) 1 c) 10 d) 100
- d) The side length of a square = 3cm then the ratio between it's side length and it's perimeter equals
- a) 4 b) 3 c) $\frac{1}{4}$ d) $\frac{1}{3}$
- e) The ratio between 12 kirat to $1\frac{1}{2}$ feddan equals
- a) 12 : 15 b) 4 : 1 c) 1 : 3 d) 3 : 1
- f) The range of values 7 , 3 , 6 , 9 , 5 is
- a) 3 b) 4 c) 6 d) 12

Q2 :

- a) A quantity of Honey of 2 liters is needed to be distributed into small bottle the capacity of each of them 40 cm^3 find the number of needed bottles ?
- b) An alloy is made of gold and copper , it's weight is 70 gm , the weight of copper in it is 7gm . find the percentage of the pure gold in it.

Q3 : A man sold his car after one year of using it with price L.E 52000 if its buying price was L.E 65000 find the percentage of his loss .

Q4 : A box in the shape of a cube in which the length of the inner edge is 36 cm . it's wanted to fill it with washing soap bars in the shape of a cube of edge length 9cm . How many bars can be put in this box .

Q5 : The following table shows the daily wages of 50 workers in a factory

Wages	10-	20-	30-	40-	50-	60-	70-80	Total
Number of workers	3	6	10	15	8	5	3	50

First : draw the frequency curve

Second : Find the percentage of the number of workers whose wages begins from L.E 30 to less than L.E 50

Model (3)

Q1 : Choose the correct answer :

(1) If $\frac{a}{b} = \frac{c}{d}$ then which of the following statements is true ?

a) $a \times c = b \times d$

b) $\frac{a}{d} = \frac{c}{b}$

c) $\frac{a-3}{b-3} = \frac{c}{d}$

d) $a \times d = b \times c$

(2) If the sum of edges length of a cube is 144 cm then it's volume equals

a) 1728 cm

b) 1728 cm³

c) 144 cm³

d) 144 cm

(3) At a moment , the length of the shade of a tree of height 3m was 180 cm , then same what is the length of the shade of another tree of height 2 m at the moment

a) 60 cm

b) 90 cm

c) 120 cm

d) 150cm

(4) A painter has 25 liters of paints. He uses 2.5 liter of paint per hour. If he finished his work after 5.5 hours. Then how many liters of paint are remained?

a) 10.25 litres

b) 11.25 litres

c) 12.75 litres

d) 13.75 litres

(5) If the price of goods in clothes shop is 240 pounds. And its price during sale is 180 pounds then the discount percentage is.....

a) 15%

c) 20 %

c) 25%

d) 30%

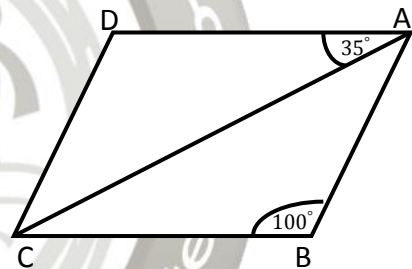
Q2 :

c) If the drawing scale for a map is 1 : 1000 and the length of a road equals 5km. what is the length of this road in the map?

d) Three persons involved in a business. The first paid 60000 pounds, the second paid 80000 pounds & the third paid 90000 pounds at the end of the year the net profit was 20700 pounds calculate the share of each of them.

Q3 :

a) In the opposite figure ABCD is a parallelogram , find m ($\angle ACD$) :



b) If the percentage of success for a school equals 85% and the number of the students in this school equal 800 students. If the ratio between the number of boys and the number of girls equals 2 : 3 find the number of succeeded girls in this school ?

Q4 :

A vessel in the shape of a cube whose edge length is 10.5 cm **first** : Calculate the volume of this vessel in cm^3 **second** : How many mm^3 of water is the capacity of this cube ?

Q5 :

The following table represents the temperature degrees that expected for 30 cities.

a) Draw the frequency curve then answer the following:-

Temperature degree	24-	28-	32-	36-	40-	44-	Total
No. of cities	3	4	7	9	5	2	30

b) What is the number of cities whose temperature's are 40 degree and more ?

Model (4)

1- Complete:

- a) 5 Kg : 3000 gm = :
- b) $1.45 \text{ L} + 0.5 \text{ dm}^3 + 50 \text{ cm}^3 = \text{..... L}$
- c) If $A:B = 2:3$, $B:C = 6:7$ then $A:C = \text{.....} : \text{.....}$
- d) A cuboid with a square base of side length 6 cm and height 10 cm then it's volume is
- e) $\frac{9}{20} = \text{.....} \%$

2- Choose the correct answer:

- a) $\frac{2}{3} : 3\frac{1}{3} = \text{.....}$
- a-1:2 b-2:5 c-1:10 d-1:5
- b) The diagonals are perpendicular in ,
- a- square , rectangle b- rhombus , rectangle
- c- square , rhombus d- parallelogram , rectangle
- c) If $\frac{a}{b} = \frac{c}{d}$ so which of the following is true
- a- $a \times c = b \times d$ b- $a \times d = b \times c$ c- $a \times b = c \times d$ d- $d \times c = b \times a$
- d) A plough for agricultural land ploughs 15 feddens in 10 hours then the rate of this plough = Feddens/h
- a- $\frac{2}{3}$ b- $\frac{3}{2}$ c- $\frac{5}{2}$ d- $\frac{5}{3}$

e) A cube the sum of all edges 144 cm then its volume equal...

- a- 1728 cm b- 1728 cm^3 c- 144 cm^3 d- 144 cm^2

3- a) If the distance between two cities is 180 km with a drawing scale

1 : 9000000 ,find the distance between them on the map

b) A car consumes 20 liters of benzene to cover 180 km , how many liters of benzene does the car consume to cover 540 km

4- a) in the opposite figure ABCD is a parallelogram in which

$$m(\angle B) = 110^\circ$$

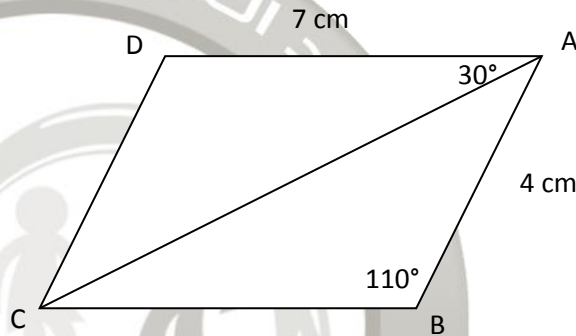
$$m(\angle DAC) = 30^\circ$$

$$AB = 4 \text{ cm} , AD = 7 \text{ cm}$$

Find , a) $m(\angle D)$, b) $m(\angle BAC)$

c) $m(\angle ACD)$

d) The perimeter of parallelogram



b) A sum of money is distributed between two persons in the ratio 3 : 5 ,if the share of the second exceeds the share of first by L.E 30 ,Find the share of each one

5- a) A company for electrical appliance displays the T.V set for

1062 pounds if the company sold with profit percentage is

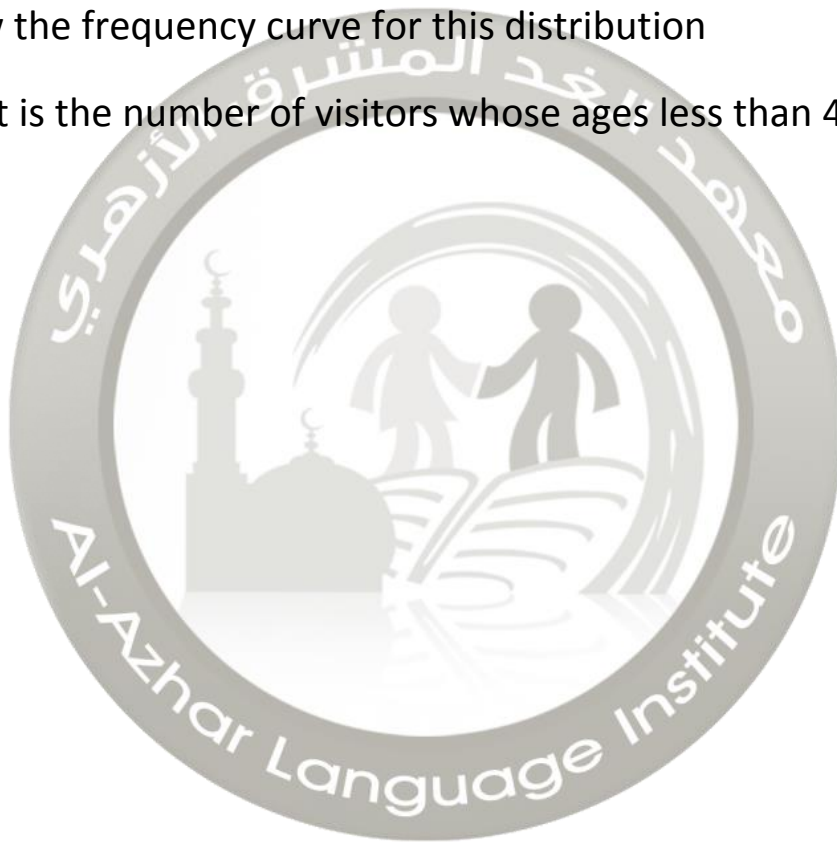
14% , find the cost price for the T.V set

b) The following table shows the ages of visitors to an exhibition within an hour of the day

Visitor age	10-	20-	30-	40-	50-	Total
Number of visitors	6	9	12	10	8	45

a) Draw the frequency curve for this distribution

b) What is the number of visitors whose ages less than 40 years?



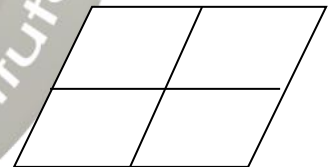
Model (5)

1- Complete:

- a) The ratio between the perimeter of the rhombus and its side length =
..... :
- b) 18 Kirats : 2 feddans = :
- c) $1500 \text{ cm}^3 = \dots\dots\dots$ Liters
- d) The range of the values 7 , 15 , 24 , 11 , 3 and 18 is
- e) The diagonals are equal in and

2- Choose the correct answer:

- a) If the ratio among the measurement of the angles is 1 : 2 : 3 then the measure for the smallest angle equal
(10° - 30° - 45° - 60°)
- b) If $a:b = 2:5$ then $\frac{a}{a+b} = \dots\dots\dots$ ($2:5$ - $2:7$ - $3:7$ - $7:2$)
- c) In the opposite figure, The number of parallelograms which can be obtained is
(4 - 5 - 7 - 9)
- d) The following data are descriptive except :
(Favorite color – birthday – age – blood type)
- e) If the length in drawing is 2 cm ,and the real length is 6 cm .then the drawing length is : ($1:3$ - $1:30$ - $1:300$ - $1:300000$)



- 3- a)** A metallic cube of edge length 12 cm ,its wanted to melted and convert it into ingots in the shape of cuboids each of them has the dimensions 3 cm , 4 cm ,6 cm calculate the number of ingots that are obtained
- b)** Three merchants the profit of first 42% the profit of the second is 28% the profit of the third 36000 pounds what is the total profit in pounds?
- 4- a)** The ratio between the length and the width of rectangle is 7:4 ,If the perimeter of the rectangle is 44 cm .Find out the length and the width of the rectangle and then calculate the area
- b)** A tractor ploughs 6 feddans within 3 hours find the rate of work of this tractor , if another tractor ploughs 6 kirats in 10 minutes ,which of them is better
- 5-a)** Three persons formed a company the share of first is $\frac{5}{3}$ the share of The second ,and the share of second $\frac{4}{3}$ the share of third ,If the share of first exceeds the share of the third by 8250 pounds find the share of each
- b)** To help the poor people ,a group of students donated amounts of money in pounds shown in the following table .

Money in pounds	3-	5-	7-	9-	11-	Total
Number of students	7	10	15	10	8	50

- a) Draw the frequency curve for the distribution
- b) what is the number of students that donated 7 pounds or more?

Model (6)

Q1 : Choose the correct answer :

(1) If the Ratio among the measures of angles of a triangle is 2 : 3 : 4 then the measure of its angles in the same order are

a) 20 , 30 , 40

b) 20 , 60 , 80

c) 40 , 80 , 60

d) 40 , 60 , 80

(2) If Hazem drinks 21 glasses of milk weekly then the rate of what the drinks daily is

a) 3 glasses

b) 7 glasses

c) 14 glasses

d) 20 glasses

(3) A metallic piece in the shape of a cube of edge length 40cm it's melted & converted to a cuboid whose base area = 2000 cm^2 then it's height =

a) 16 cm

b) 32 cm

c) 64 cm

d) 80cm

(4) On a map is drawn such that each 1 centimetre represents 5 km. then if the distance between two villages is $\frac{1}{2}$ km then the distance between them on this map in centimeter equals

a) 0.1

b) 0.4

c) 25

d) 10

(5) A merchant sold his goods with profit 15% then the percentage of the selling price to the buying price equals

a) 15 %

b) 85 %

c) 115 %

d) 150 %

Q2 :

A manufacture of clothes produces 8000 pieces daily , if the ratio between what this manufacture produce from the childrens clothes to the adults clothes 2 : 3 Find the number of pieces for children's clothes produced in 3 days.

Q3 :

a) If $\frac{x-3}{6} = \frac{5}{3}$, find the value of x?

b) If the feast festival, one of the shops mode a discount 15% for the price of a refrigerator which equal 1750 pounds. Find the price of the refrigerator after discount ?

Q4 :

If a quantity of sugar with volume 2700 cm^3 need to can in a box , show which of the following boxes is suitable ? and why?

a) A cuboid with dimensions 45 cm , 40 cm & 15 cm.

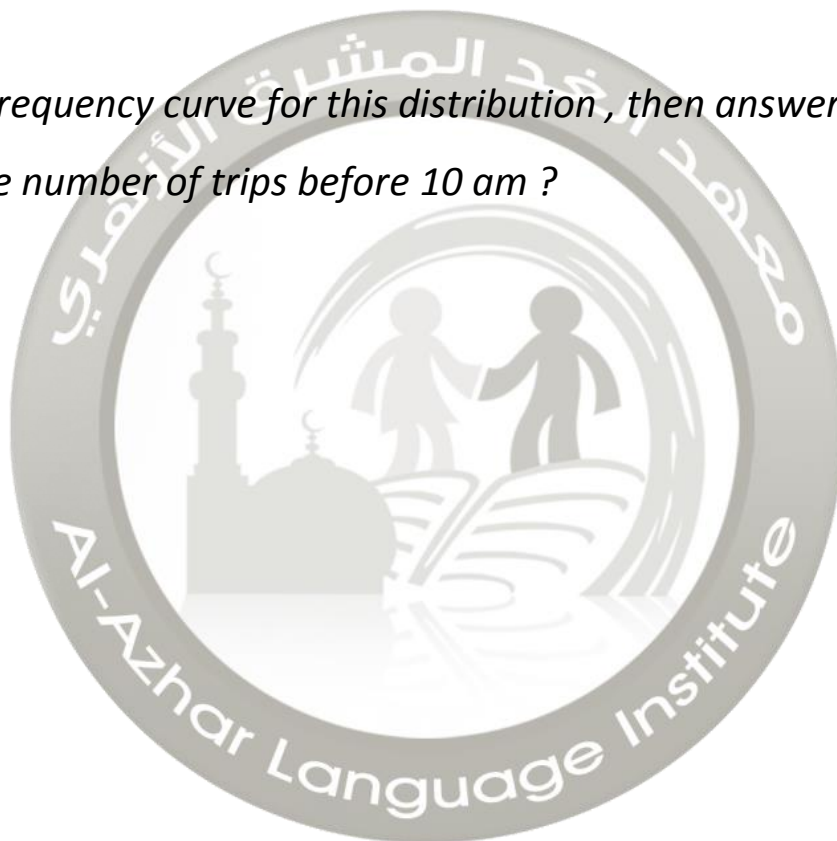
b) A cube the length of its inner dimension equals 30 cm .

Q5 :

The following table shows the dates & the number of trips (in one of the bus stations for the governorates)

Dates	6 am	8 am	10 am	12 am	2 pm	Sum
Number of trips	30	41	40	16	13	140

Draw the frequency curve for this distribution , then answer the following
What is the number of trips before 10 am ?



Model answer 1

Q1 complete:

a) right angle

b) $A : b : c$

$$\begin{array}{c} 2 : 3 \rightarrow 3 \\ 3 : 3 : 5 \end{array}$$

$$6 : 9 : 15 (\div 3) \longrightarrow a : c =$$

$$2 : 3 : 5 \quad a : c = 2 : 5$$

c) $\pi : 1$

$$d) X + 12 = 4 \times 6 = 24$$

$$X = 24 - 12 = 12$$

e) D.L : R.L

$$2.5 \text{ cm} : 1.6 \text{ m} \quad (1.6 \text{ m} \times 100 = 160 \text{ cm})$$

$$2.5 : 160 \quad (\times 10)$$

$$25 : 1600 \quad (\div 25)$$

$$1 : 64$$

$$f) \text{ Height} = \frac{\text{volume}}{B A} = \frac{1000}{100} = 10 \text{ cm}$$

Q2.choose:

a) Square

$$b) \frac{4}{x} = \frac{12}{18}$$

$$X = \frac{4 \times 18}{12} = 6$$

$$c) E = \sqrt[3]{V} = \sqrt[3]{125} = 5 \text{ cm}$$

$$B A = E \times E = 5 \times 5 = 25 \text{ cm}^2$$

d) The rate = $14 \div 3.5 = 4$ feddan /hr

e) $W = A \div L = 24 \div 6 = 4 \text{ cm}$

$P. = (L + W) \times 2 = (4 + 6) \times 2 = 20 \text{ cm}$

$P : L$

$20 : 6 \quad (\div 2)$

$10 : 3$

Q3.a) T.v : oven : fridge

$4 : 5 : 8$

$1200 : _ : _$

the price of oven = $\frac{5 \times 1200}{4} = 1500 \text{ pounds}$

the price of fridge = $\frac{8 \times 1200}{4} = 2400 \text{ pounds}$

Q3.b)

a) Capacity = $20 \times 20 \times 20 = 8000 \text{ cm}^3 \div 1000 = 8 \text{ Litre}$

b) The price of honey = $8 \times 8 = 64 \text{ pounds}$

Q4.a)

$X = \frac{3 \times 22}{6} = 11 \text{ m}$

Q4.b) c.p = $45\,000 + 5\,000 = 50\,000 \text{ pounds}$

Height	22 m	X
shadow	6 m	3 m

c.p : profit : s.p

$100 : 10 : 110$

$50\,000 : _ : X$

$s.p = \frac{110 \times 50\,000}{100} = 55000 \text{ pounds}$

Q5.a) volume of the metallic piece = $30 \times 30 \times 5 = 4500 \text{ cm}^3$

Q5.b)

a) $M(<ADC) = 180 - 70 = 110^\circ$

b) Perimeter = $7 + 6 + 3.8 + 3.8 = 20.6 \text{ cm}$

Q6.a)

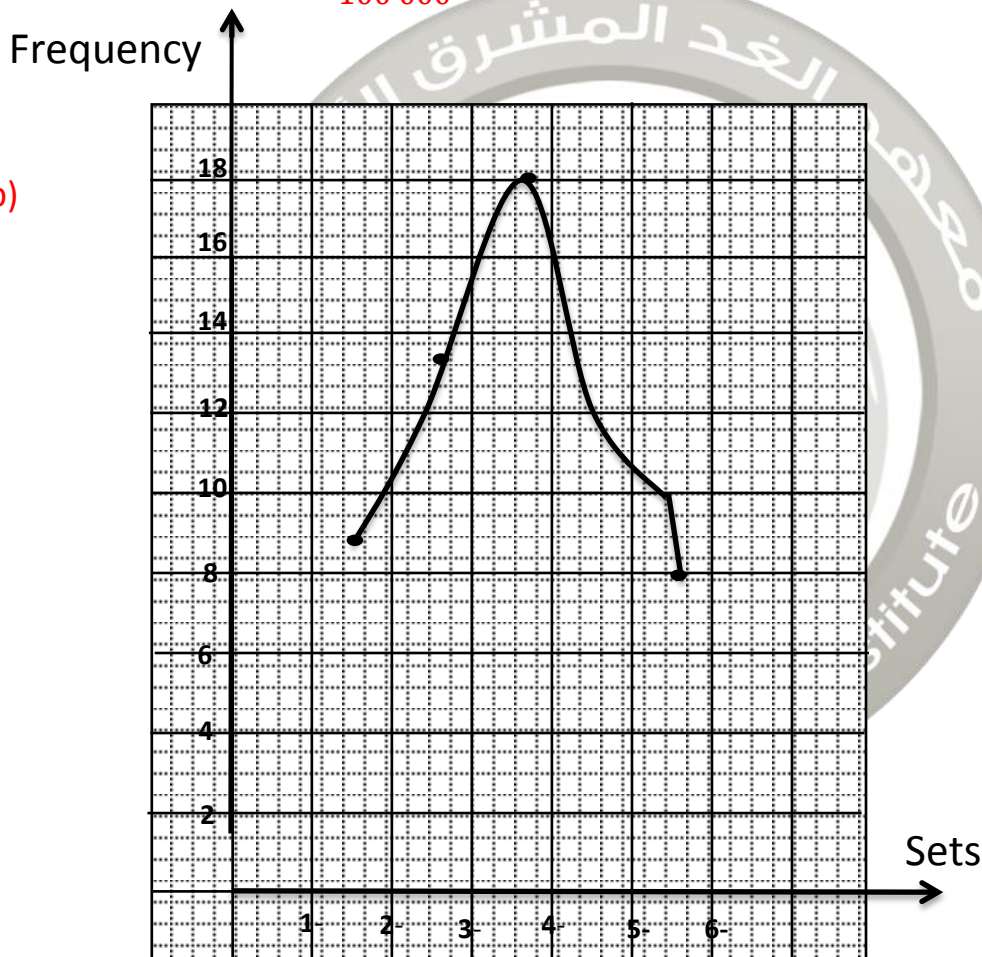
D.L : R.L

1 : 100 000

— : 36

$$\text{D.L} = \frac{36 \times 1}{100\,000} = 0.00036 \text{ km} \times 100\,000 = 36 \text{ cm}$$

b)



The percentage = $\frac{18}{60} \times 100 = 30\%$

Model Answer (2)

(1) a)

Gm	100	30
calories	300	X ?

$$x = \frac{30 \times 300}{100} = 90 \text{ calories}$$

b) $E = \sqrt{FA} = \sqrt{4} = 2cm$

$$V = E \times E \times E = 2 \times 2 \times 2 = 8cm^3$$

c) $11 \text{ liter} = \times 1000 = 1000 \text{ cm}^3$

$$V. \text{ of liquid} = 1000cm^3$$

$$E = \sqrt[3]{V} = \sqrt[3]{1000} = 10cm$$

d) $\frac{1}{4}$

e) 12 kirats : $1\frac{1}{2}$ feddons

$$12 \text{ kirats} : 36 \text{ kirats} \quad (\div 12)$$

$$1 : 3$$

f) Range = max value – min value = $9 - 3 = 6$


Q2 : a) $2L = 2000 \text{ cm}^3$

Number of bottles $= \frac{2000}{40} = 50 \text{ bottles}$

b) The weight of the pure gold $= 70 - 7 = 63 \text{ gm}$

The percentage of the pure gold $= \frac{63}{70} \times 100 = 90 \%$

Q3 : C.P : loss : s.p

100%	:	?	:
65000	:	13000	:
			

Percentage of loss $= \frac{100 \times 13000}{65000} = 20\%$

Q4: volume of cube $= 36 \times 36 \times 36 = 46656 \text{ cm}^3$

Volume of soapbar $= 9 \times 9 \times 9 = 729 \text{ cm}^3$

Namber opf soapbars $= \frac{46656}{729} = 64 \text{ soap bars}$

Q5:

Sets	Center of the set	Frequency	Point
10 -	$\frac{10+20}{2} = 15$	3	(15 , 3)
20 -	$\frac{20+30}{2} = 25$	6	(25 , 6)
30-	$\frac{30+40}{2} = 35$	10	(35 , 10)
40-	$\frac{40+50}{2} = 45$	15	(45 , 15)
50-	$\frac{50+60}{2} = 55$	8	(55 , 8)
60-	$\frac{60+70}{2} = 65$	5	(65 , 5)
70-80	$\frac{70+80}{2} = 75$	3	(75 , 3)

Draw by yourself

Second: The no of workers = $10 + 15 = 25$ workers

The percentage of workers = $\frac{25}{50} \times 100 = 50 \%$

Model Answer (3)

1) $a \times d = b \times c$

2) $E = \frac{144}{12} = 12cm$

$V = 12 \times 12 \times 12 = 1728 cm^3$

3) The shade = $\frac{180 \times 2}{3} = 120 cm$

Height	3 m	2m
Shade	180 cm	×

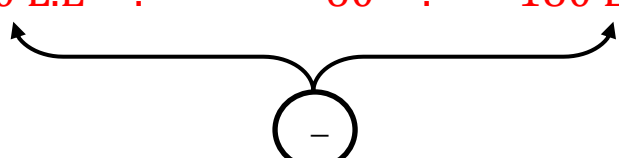
4) after 5.5 hours he uses = $\frac{2.5 \times 5.5}{2} = 13.75 liters$

The paint remained = $25 - 13.75 = 11.25 liters$

Liter	2.5	×
Hours	1	5.5

5) Befor discount : discount : after discount

100% : ? :
 240 L.E : 60 : 180 L.E



Percentage of discount = $\frac{60 \times 100}{240} = 25\%$

Q2: a) $D.L = \frac{1 \times 5}{1000} = \frac{1}{200} \times 100000 \text{ km} = 500 \text{ cm}.$

D.L : R.L

1 : 1000

? : 5km

b) 1st : 2nd : 3rd

60000 : 80000 : 90000 (÷ 10000)

6 : 8 : 9

1st : 2nd : 3rd : sum

6 : 8 : 9 : 23

20700

- The share of 1st = $\frac{6 \times 20700}{23} = 5400 \text{ L.E}$
- The share of 2nd = $\frac{8 \times 20700}{23} = 7200 \text{ L.E}$
- The share of 3rd = $\frac{9 \times 20700}{23} = 8100 \text{ L.E}$

Q3:

a) $m(\angle D) = 100^\circ$

$M(\angle ACD) = 180 - (100 + 35) = 45^\circ$

b) Boys : girl : sum

2 : 3 : 5

? : 800

The number of girls = $\frac{3 \times 800}{5} = 480 \text{ girls}$

The number of succeeded girls = $480 \times \frac{85}{100} = 408 \text{ girls}$

Q4: First: $V \text{ of the vessel} = E \times E \times E = 10.5 \times 10.5 \times 10.5$
 $= 1157.625 \text{ cm}^3$

Second: $1157.625 \times 1000 \text{ cm}^3 = 1157625 \text{ mm}^3$

Q5: b) The number of cities $= 5 + 2 = 7$ cities

Q5: a)

Sets	Center of the set	Frequency	Point
24 -	$\frac{24+28}{2} = 26$	3	(26 , 3)
28 -	$\frac{28+32}{2} = 30$	4	(30 , 4)
32 -	$\frac{32+36}{2} = 34$	7	(34 , 7)
36 -	$\frac{36+40}{2} = 38$	9	(38 , 9)
40 -	$\frac{40+44}{2} = 42$	5	(42 , 5)
44 -	$\frac{44+48}{2} = 46$	2	(46 , 2)

Draw by yourself

Model answer 4

1.comple:

a) $5000 : 3000 \div 1000$ ($5 \text{ kg} \times 1000 = 5000 \text{ gm}$)

$5 : 3$

b) $1.45 \text{ L} + 0.5 \text{ dm}^3 + 0.05 \text{ L} = 2 \text{ L}$ ($50 \text{ cm}^3 \div 1000 = 0.05 \text{ L}$)

c)

$A : B : C$

$2 : 3 : 3$

$6 : 6 : 7$

$12 : 18 : 21 \div 3$

$4 : 6 : 7$

$a : c = 4 : 7$

d) volume of cuboid = $L \times W \times h = 6 \times 6 \times 10 = 360 \text{ cm}^3$ $L = W = 6$

e) $(\frac{9}{20} \times 100)\% = 45\%$

2.choose:

a) $\frac{2}{3} : \frac{10}{3}$

$6 : 30$

$1 : 5$

b) Square and rhombus

c) $a \times d = b \times c$

d) The rate = $15 \div 10 = \frac{3}{2}$ feddan /hr

$E = \frac{\text{sum of edges}}{12} = \frac{144}{12} = 12 \text{ cm}$

$V = E \times E \times E = 12 \times 12 \times 12 = 1728 \text{ cm}^3$

Q3.a. D.L : R.L

1 : 9 000 000

X : 180

$X = \frac{180 \times 1}{9\,000\,000} = \frac{1}{50\,000} \text{ km}$

$\frac{1}{50\,000} \text{ km} \times 100\,000 = 2 \text{ cm}$

b)

Liter	20	X
Km.	180	540

$X = \frac{540 \times 20}{180} = 60 \text{ L}$

Q4.a.

a) $m(\angle D) = 110^\circ$ (opposite angles)

b) $m(\angle BAC) = 180 - (110 + 30) = 40^\circ$ (consecutive angles)

c) $m(\angle ACD) = 180 - (110 + 30) = 40^\circ$

d) The perimeter = $(L + W) \times 2 = (7 + 4) \times 2 = 22 \text{ cm}$

b) $P_1 : P_2$: difference

3 : 5 : 2

_ : _ : 30

$P_1 = \frac{30 \times 3}{2} = 45 \text{ L.E}$, $P_2 = \frac{30 \times 5}{2} = 75 \text{ L.E}$

Q5.a)

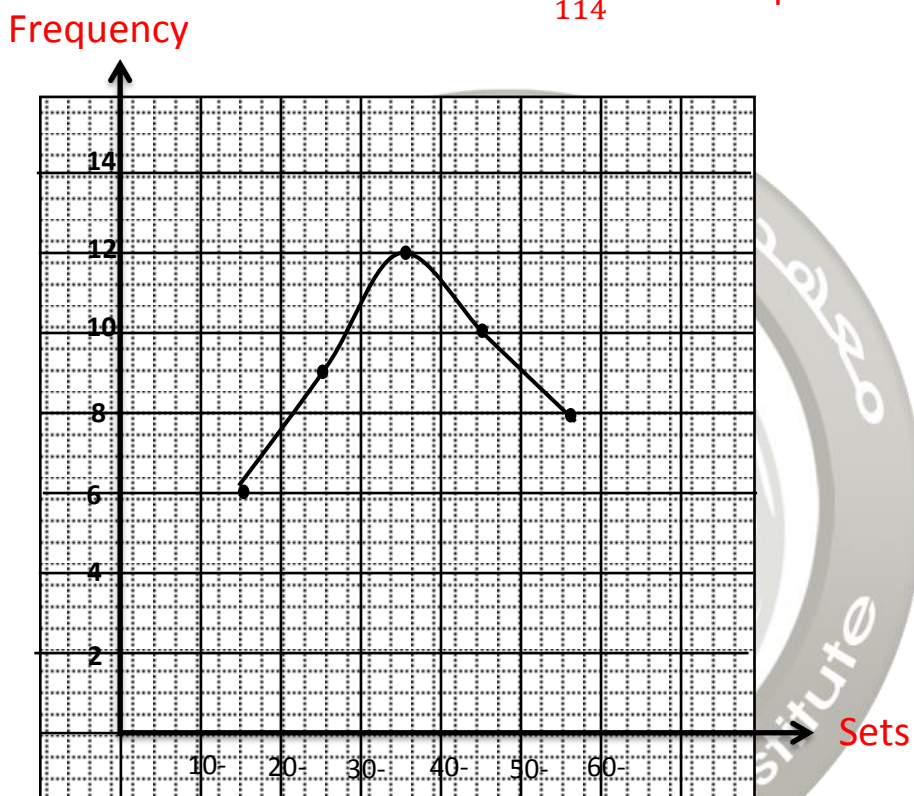
C.P : Profit : S.P

100% : 14% : 114%

_ : _ : 1026

$$C.P = \frac{1026 \times 100}{114} = 900 \text{ pounds}$$

b)



The number of visitors = 6+9+12=27 visitor

Model answer 5

Q1. Complete:

a) $4 : 1$

b) $18 \text{ kirat} : 48 \text{ kirat} \div 3$ ($2 \text{ feddan} \times 24 = 48 \text{ kirats}$)

$6 : 16 \div 2$

$3 : 8$

c) $1500 \text{ cm}^3 \div 1000 = 1.5 \text{ L}$

d) The greatest number = 24 , the smallest number = 3

Range = greatest – smallest = $24 - 3 = 21$

e) Squar – rectangle

Q2.choose :

a) $A_1 : A_2 : A_3 : \text{Sum}$
 $1 : 2 : 3 : 6$
 $- : - : - : 180$

$A_1 = \frac{180 \times 1}{6} = 30^\circ$, $A_2 = \frac{180 \times 2}{6} = 60^\circ$

$A_3 = \frac{180 \times 3}{6} = 90^\circ$, then the smallest angle is 30°

b) $A : b = 2 : 5$ then $\frac{2}{2+5} = 2 : 7$

c) 9

d) Age

e) D.L : R.L

$2 \text{ cm} : 6 \text{ m}$

($6 \text{ m} \times 100 = 600 \text{ cm}$)

$2 : 600 \div 2$

$1 : 300$

Q3.a volume of cube = $E \times E \times E = 12 \times 12 \times 12 = 1728 \text{ cm}^3$

Volume of ingots = $L \times W \times H = 3 \times 4 \times 6 = 72 \text{ cm}^3$

The number of ingots = $\frac{\text{big volume}}{\text{small volume}} = \frac{1728}{72} = 24 \text{ ingots}$

Q3.b) $1^{st} : 2^{nd} : 3^{rd} : \text{sum}$

$42\% : 28\% : - : 100\%$

$- : - : 36000 : -$

The profit of the $3^{rd} = 100\% - (42\% + 28\%) = 30\%$

The total profit = $\frac{36000 \times 100}{30} = 120\,000 \text{ pounds}$

Q4.a) $L : W : \text{Perimeter}$

$7 : 4 : 22 \quad (4 + 7) \times 2 = 22 \text{ cm}$

$- : - : 44$

$L = \frac{44 \times 7}{22} = 14 \text{ m}$, $W = \frac{44 \times 4}{22} = 8 \text{ m}$, Area = $L \times W = 14 \times 8 = 112 \text{ m}^2$

Q4.b) $6 \text{ feddan} \times 24 = 144 \text{ kirats}$, $3 \text{ hours} \times 60 = 180 \text{ min.}$

First tractor = $144 \div 180 = 0.8 \text{ kirats / min.}$

Second tractor = $6 \div 10 = 0.6 \text{ kirats / min.}$

The first tractor is the better

Q5.a) $1^{st} : 2^{nd} : 3^{rd} \quad | \quad 1^{st} : 2^{nd} : 3^{rd} : \text{difference}$

$5 : 3 : -3$

$4 : 4 : 3$

$20 : 12 : 9 \quad | \quad : 11$

$- : - : - \quad 8250$

$20 : 12 : 9$

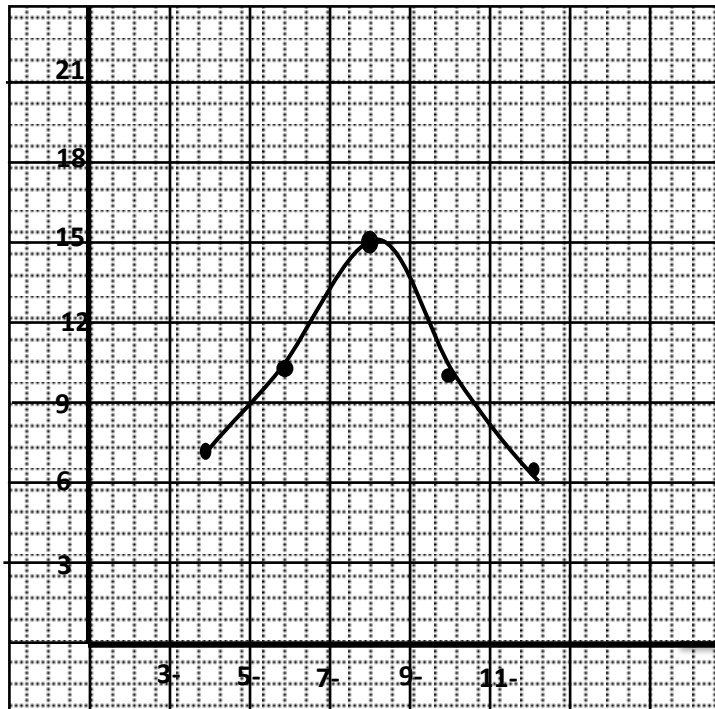
$1^{st} = \frac{20 \times 8250}{11} = 15000 \text{ pounds}$

$2^{nd} = \frac{12 \times 8250}{11} = 9000 \text{ pounds}$

$3^{rd} = \frac{9 \times 8250}{11} = 6750 \text{ pounds}$

Frequency

Q5.b)



Number of students = $15 + 10 + 8 = 33$ student

5- C.P : profit : S.P

100% : 15% : 115%

Q2 : children : adults : sum

2 : 3 : 5

? : ? : 8000

Pieces of children in one day = $\frac{2 \times 8000}{5} = 3200 \text{ pices}$

The factory produces in 3 day = $3200 \times 3 = 9600 \text{ pieces.}$

Q3 : a) $x - 3 = \frac{6 \times 5}{3} = 10$

$$x = 10 + 3 = 13$$

b) befor discount : discount : after discount

100% : 15% : 85%

1750 L.E : : ?

The price after discount = $\frac{1750 \times 85}{100} = 1487.5 \text{ L. E}$

Q4 : v.of cuboid = $45 \times 40 \times 15 = 27000 \text{ cm}^2$

v. of cube = $30 \times 30 \times 30 = 27000 \text{ cm}^3$

Both of the boxes are suitable.

Q5: B) The number of trips before 10 am = $30 + 41 = 71$ trips.

Sets	Center of the set	Frequency	Point
6 am	$\frac{6+8}{2} = 7$	30	(7 , 30)
8 am	$\frac{8+10}{2} = 9$	41	(9 , 41)
10 am	$\frac{10+12}{2} = 11$	40	(11 , 40)
12 am	$\frac{12+14}{2} = 13$	16	(13 , 16)
2 pm	$\frac{14+16}{2} = 15$	13	(15 , 13)

Draw by yourself

Good Luck

تنبيه هام أسئلة المادة في صفتين

يسمح باستخدام الآلة الحاسبة

[١] Complete :

- a) $١,١ : ٥,٥ = \dots : \dots$
- b) $\frac{3}{7} = \frac{12}{Y}$ then $X \times Y = \dots \times \dots$
- c) The diagonals are equal in length in each of \dots and \dots
- d) If the values of a frequency distribution lie between ($٢٠ - ٥٥$) then the range of this distribution = \dots

[٢] Choose the correct answer :

- a) $\frac{x}{5} = ٥\%$, then $X = \dots$

($\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{2}$ or $\frac{1}{4}$)

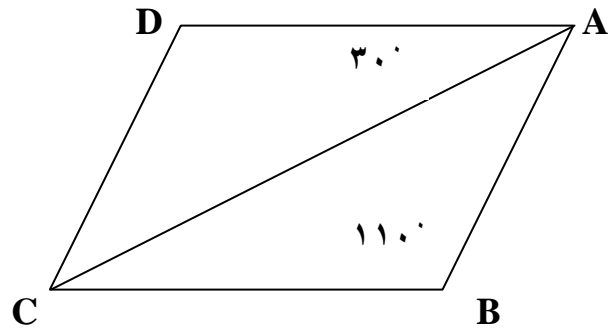
- b) ١ litre = \dots milliliter .

(١٠ , ١٠٠ , ١٠٠٠ or ١٠٠٠٠)

- c) In the opposite figure :

A B C D is a parallelogram ,

$m(\angle A C D) = \dots$

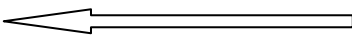


(٢٠° , ٣٠° , ٤٠° or ٥٠°)

- d) The opposite data are descriptive except \dots

(the favorite colour , birth place , age or blood species)

بقية الأسئلة في الصفحة الثانية



(٢)
تابع أسئلة امتحان الرياضيات (إنجليزي) للصف السادس الابتدائي
الفصل الدراسي الأول ٢٠١١ / ٢٠١٢

[٣] a) Which is greater in volume and why ? a cuboid whose dimensions are ٤ , ٥ , ٦ cm or a cube of edge length ٥ cm .

b) Ahmed draw a picture to his brother Emad with a drawing scale ١ : ٣٠ , if the real length of Emad is ١٨٠ cm , what is his length in the picture ?

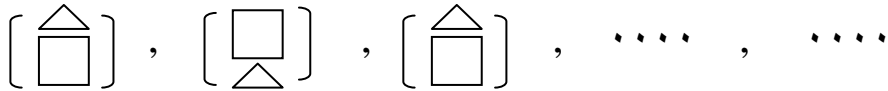
[٤] a) Mohab spends LE ٦٠ within three days , what is the rate of what Mohab spends per a day ?

b) The following table shows the age of visitors to an exhibition within an hour of the day .

Visitor's age	١٠ -	٢٠ -	٣٠ -	٤٠ -	٥٠ -	Total
Number of visitors	٦	٩	١٢	١٠	٨	٤٥

Draw the frequency curve for this distribution .

[٥] a) Discover the patten and describe it , then complete by repeating (twice)



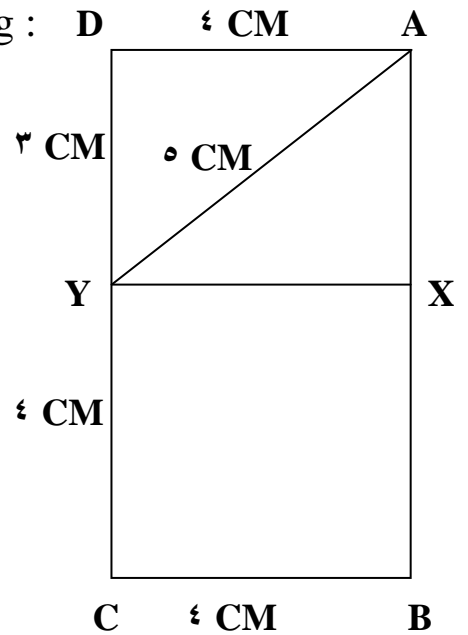
b) In the opposite figure , complete the following :

١) The figure (A X Y D) represents

٢) The figure (X B C Y) represents

٣) The figure (A B C Y) represents

And it's per meter = cm



انتهت الأسئلة مع أطيب الأمنيات بالنجاح

بسم الله الرحمن الرحيم



Assiut Governorate

Directorate of Education

The Primary Six examination, for the first Term 2011/2012

Mathematics

Time : 1 1/2 hour

امتحان الرياضيات باللغة الإنجليزية للصف السادس الابتدائي

الفصل الدراسي الأول ٢٠١١/٢٠١٢م

يسمح باستخدام الآلة الحاسبة

لاحظ أن أسئلة هذا الامتحان في ورقتين

تنبيه هام : يسلم الطالب ورقة امتحانيه باللغة العربية مع الورقة المترجمة .

Answer the following questions :

[1] Choose the correct answer : -

(1) if the numbers 2 , x , 10 , 15 were in proportionate then the value of x=

- (a) 30 (b) 6 (c) 3 (d) 15

(2) $\frac{2}{5} : \frac{7}{2} = \dots\dots\dots : \dots\dots\dots$

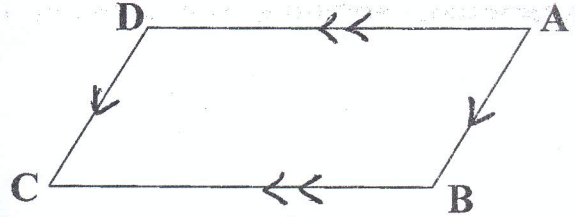
- (a) 7 : 5 (b) 5 : 7 (c) 35 : 4 (d) 4 : 35

(3) in the opposite figure

ABCD is a parallelogram then

$M(\angle A) + M(\angle B) = \dots\dots\dots$

- (a) 90° (b) 180° (c) 360° (d) 108°



(4) The volume of a cube equals 64 cm^3 then it's base area equals =

- (a) 16 cm^2 (b) 16 cm (c) 4 cm^2 (d) 4 cm

[2] Complete:-

(1) if $\frac{X+4}{6} = 3$, X =

(2) $\frac{7}{20} = \dots\dots\dots \%$

(3) if $a : b = 3 : 5$, $b : c = 1 : 4$ then $a : b : c = \dots\dots : \dots\dots : \dots\dots$

(4) if the marks of 6 pupils in one of the tests are 29 , 32 , 57 , 40 , 36 , 49 then the range for these marks is equal to =

بقية الأسئلة في الورقة الثانية

تابع امتحان الرياضيات باللغة الإنجليزية للصف السادس الابتدائي

الفصل الدراسي الأول ٢٠١١/٢٠١٢ م

[3] (A) if the ratio among the heights of three buildings 3 : 4 : 5 and if the height of the first building is 12 metres calculate the heights of the second and the third building .

(B) if the drawing scale which is registered on a map of some inhabitant's cities is 1 : 700000 and if the distance between two cities on this map is 5 cm- find the real distance between them.

[4] (A) Find the selling price of goods sold for 32400 pounds, with profit percentage 8 %.

(B) A metallic cube of edge length 8 cm it is wanted to be melted and convert it into ingots in the shape of cuboids each of them has the dimensions 4 , 2 , and 1 cm. calculate the number of ingots that are obtained.

[5](A) A cube shaped vessel, its internal edge length is 30 cm , it is filled with food oil. Calculate its capacity in litres.

(B) The following table shows the age of visitors to on exhibition with in an hour of the day.

Visitor's age	10 -	20 -	30 -	40 -	50 -	sum
Number of visitors	6	9	12	10	8	45

Draw the frequency curve for this distribution.

CAIRO GOVERNORATE
CAIRO EDUCATIONAL ZONE
SIXTH GRADE PRIMARY EXAMINATION
THE FIRAST TERM 2011 - 2012

MATHEMATICS

TIME : 1 ½ HOUR .

امتحان الصف السادس الابتدائي الفصل الأول ٢٠١١ - ٢٠١٢
الرياضيات بالإنجليزية (يسمح باستعمال الآلة الحاسبة) الزمن : ساعة ونصف

Answer the following questions:- (calculator is allowed)

Question (1) Complete each of the following statements :

- a The ratio between 250 piasters and $7\frac{1}{2}$ pounds equals
- b The four sides are equal in length in each of,
- c The listed price of a T.V set is 1200 pounds. If the discount is 10 % of its original price, then its price after discount is Pounds.
- d If the values of frequency distribution lie between 5 and 35 , then the range of this distribution equals

Question (2) Choose the correct answer :

- a The ratio between the side length of a rhombus and its perimeter is [1 : 3 , 1 : 4 , 3 : 1 , 4 : 1]
- b If $\frac{x+8}{6} = 2$, then $x =$ [2 , 4 , 6 , 12]
- c The volume of a cube whose edge length 5 cm equals cm^3 [25 , 100 , 125 , 150]
- d The following data are descriptive except [colour of school uniform suit , preferable hoppy, age , blood species]

(بقية الأسئلة في الصفحة المقابلة)

Question (3) :

- a) Hany, Mona , and Hend participated in a commerce. Hany paid 1500 pounds , Mona paid 2000 pounds , and Hend paid 2500 pounds . At the end of the year , the profit of the company was 1200 pounds. Find the share of each of them from the profit.
- b) A car consumes 20 litres of Benzin to cover 180 km. How many litres of Benzin does the car consume to cover 540 km?

Question (4) :

- a) If the drawing scale which is registered on a map of some in Habitant's cities is 1 : 500 000 and the distance between two cities on this map is 3 cm , the find the real distance between them.
- b) The volume of a cuboid is 400 cm^3 , its length is 10 cm and its height is 8 cm . Find the area of its base and its width.

Question (5) :

- a) The sum of lengths of all edges of a cube is 48 cm . calculate its volume .
- b) The following table shows the marks of 100 students in a month in Mathematics .

Marks	10 -	20 -	30 -	40 -	50 -	Total
Number of students	10	15	25	35	15	100

What is the number of students who got 40 marks and more?

(انتهت الأسئلة مع دعواتنا لكم بالنجاح)

الزمن
ساعة ونصف

محافظة المنوفية – مديرية التربية والتعليم
امتحان النقل من الصف السادس الابتدائي
نصف العام – ٢٠١٢
الأسئلة في صفحتين
(ص ١)

المادة
الرياضيات (مترجم)
لدارس اللغات

Answer the following question:

Calculators are permitted

(١) : Choose the correct answer from the given ones :

(a) $٥ m^3 = \dots\dots\dots$

($٥٠٠٠ d m^3$ or $٥٠٠٠ d m^2$ or $٥٠٠ d m^3$ or $٥٠٠ d m$)

(b) $١ \frac{١}{٤} = \dots\dots\dots \%$

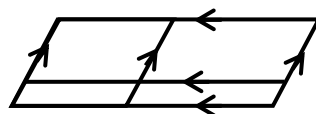
(١٧٥ or ١٥٠ or ١٢٥ or ١٤٠)

(c) If $a : b = ٢ : ٣$ and $c : b = ٥ : ٢$ then $a : c = \dots\dots : \dots\dots$

($٢ : ٥$ or $٤ : ١٥$ or $١٥ : ٤$ or $٥ : ٣$)

(d) In the opposite figure :

The number of parallelograms =



(٤ or ٥ or ٩ or ٧)

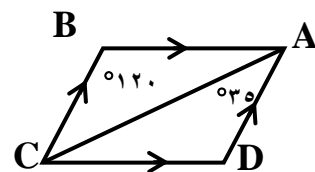
(٢) : Complete each of the following :

(a) The two diagonals are perpendicular in ,

(b) The proportional is

(c) In the opposite figure :

A B C D is a parallelogram then $m(\angle A C D) = \dots\dots\dots^\circ$



(d) If the marks of ٦ pupils in one of the tests are ١٩ , ٢٣ , ٢٦ , ٣٩ , ٤٧ , ٣٠ then the range for these marks =

(٣) : (A) A man distributed ٦٣٠٠ pounds between his three sons. If the share of the first was third of the money and the ratio between the share of the second and the third is equals ٣ : ٤ Calculate the share of each of them .

(B) A computer colour printer prints ١٢٠ paper each ٤ minutes.

Find the rate of work of this printer .

Find the time with hours which is needed to prints ٩٠٠ paper .

بقية الأسئلة فى الصفحة الثانية

تابع امتحان النقل من الصف السادس الابتدائى - نصف العام ٢٠١٢

ص (٢)

المادة : الرياضيات مترجم (لمدارس اللغات)

(A) : A photo was taken for one of the very delicate insects by enlargement ratio ٩٠ :

١ if the actual length of the insect length is ٠,٧ m m .

Find the length of the insect in the picture (approximated to the nearest cm)

(B) The total area of a cube = ٥٤ c m^٢

Calculate its volume .

(A) : A vessel in the shape of a cuboid with internal dimensions ٢٥ , ٢٠ and ١٦ c m ,
filed with honey .

Calculate the capacity of the pot of honey .

If the price for the honey is ٢٥ pounds per liter . **Calculate** the price of all honey

(B) On the orphan day a group of students of it class donated amounts of money in pounds shown in the following table :

Money in pounds	٣ -	٥ -	٧ -	٩ -	١١ -	sum
Number of students	٧	١٠	١٥	١٠	٨	٥٠

(١) What is the number of student who demoted by ٧ pounds and more. What
you advise to do ?

(٢) Draw the frequency for this distribution .

انتهت الأسئلة

(١)

محافظة بنى سويف
مديرية التربية والتعليم

إمتحان الفصل الدراسى الأول ٢٠١١/٢٠١٢

للفصل السادس الابتدائي (عام)

مادة : الرياضيات المترجم الزمن : ساعة ونصف

Answer the following questions:

١-Choose the correct answer from these between brackets :-

- (a) The ratio between ١٥٠ cm : ٣ metres = :
(١ : ٢ or ١ : ٥ or ١ : ١٥ or ١ : ٣٠)
- (b) If the numbers ٦ , x , ١٠ , ١٥ were in
proportional then the value of x =
(٨ or ٩ or ١٠ or ٢٠)
- (c) The opposite data are quantitive except
(the weights or the birth place or the tallness or
the age)
- (d) A cuboid of dimensions ٣ , ٤ and ٥ cm then its
value = cm^٣ (٢٠ or ٣٠ or ٥٠ or ٦٠)

باقى الأسئلة بالصفحة الثانية

(٢)

٢- Complete the following:-

- (a) The two diagonals are equal in length in each of
and
- (b) If the values of frequency distribution lie between
(٣٠,٧٠) then the range of this distribution =
- (c) A cube which the area of its base = ٢٥cm^٢ then its
volume = cm^٣
- (d) If the drawing length is ٢cm and the real length is ١٢
kilo meters then the drawing scale =

باقى الأسئلة بالصفحة الثالثة

(٣)

- ٣- (A) Two wire pieces the ratio between their lengths is $٦ : ٨$ if the sum of their lengths is ١٢٦ meters.

Calculate the length of each piece.

- (B) Two persons participated in a commercial the first paid L.E ٧٠٠٠ and the second paid L.E ٦٠٠٠ at the end of the year the profit was L.E ٣٩٠٠ .

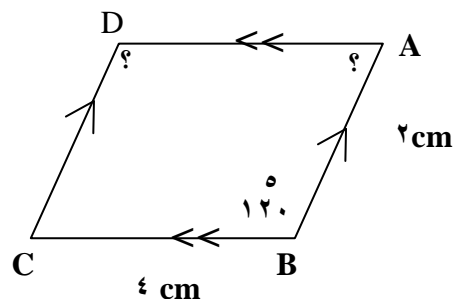
Calculate the share of each of them from profit.

- ٤-(A) In the opposite figure

A B C D is a parallelogram

in which $m(\angle B) = ١٢٠^\circ$,

$BC = ٤$ cm , $AB = ٧$ cm



With out using Geometrical instruments . Find :

١- $m(\angle D)$

٢- $m(\angle A)$

باقي الأسئلة بالصفحة الرابعة

(٤)

رياضيات مترجم سادس الابتدائي الفصل الدراسي الأول ٢٠١١/٢٠١٢

- ٣- Complete A D //

٤- The perimeter of the parallelogram

ABCD = cm

- (b) A class contains ٤٠ pupils, ٣٢ pupils are present in a day. **Calculate the percentage of the absentees.**

- ٥- (A) A cube shaped vessel its internal edge length is ٣٠ cm it is filled with food oil

١- Calculate the capacity of the vessel.

٢- If the price of one litre of food oil is L.E ٩,٥

Calculate the price of all oil

- (b) The following table shows the degrees of ١٠٠ pupils in one month in math .

Marks	٢٠ -	٣٠ -	٤٠ -	٥٠ -	Sum
Number of pupils	١٥	٣٠	٤٠	١٥	١٠٠

- ١- What is the number of pupils who record less than ٤٠ degrees?

٢- Draw the frequency curve for this distribution.

انتهت الأسئلة

محافظة كفر الشيخ

مديرية التربية والتعليم

امتحان الفصل الدراسي الأول للصف السادس الابتدائي ٢٠١١ / ٢٠١٢ م

المادة : الرياضيات باللغة الإنجليزية (لمدارس اللغات فقط) الزمن : ساعة ونصف

Answer all the following questions :

يسمح باستخدام الآلة الحاسبة

(١))	<p>Choose the correct answer:</p> <p>a) If $\frac{2}{7} = \frac{x}{21}$ then $x = \dots\dots\dots$ (٦ , ٢١ , ١٢ , ٧)</p> <p>b) The ratio between the two numbers $٣\frac{1}{5}$, ٩,٦ = $\dots\dots\dots$ ($\frac{1}{6}$, $\frac{3}{2}$, $\frac{1}{3}$, $\frac{2}{3}$)</p> <p>c) A cube , the perimeter of its base is ٣٦ cm, then its volume = $\dots\dots\dots$ cm^٣ . (٣٦ , ٦ , ٧٢٩ , ٣٧٨)</p> <p>d) The opposite data are "quantitive" except : $\dots\dots\dots$ (age - blood species – weight - tallness)</p>														
(٢))	<p>Complete the following :</p> <p>a) ٤,٨ litre = $\dots\dots\dots$ cm^٣</p> <p>b) ٠,٨٢٥ = $\dots\dots\dots$ %</p> <p>c) If the values of a frequency distribution lie between (١٥ , ٣٥) then ; The range of this distribution = $\dots\dots\dots$</p> <p>d) The two diagonals are perpendicular in each of $\dots\dots\dots$ and $\dots\dots\dots$</p>														
(٣))	<p>a) If the ratio among the share of Hani and the share of Sherif and the share of Khalid is ٣ : ٥ : ٧ and if the share of Hani is LE ٢٤ . Calculate the share of each of Sherif and Khalid .</p> <p>b) A company for selling the electric sets , It shows T.V for LE ٢١٠٠ , If the percentage of the profit is ١٢% , Find the buying price of T.V .</p>														
(٤))	<p>a) A picture was take to an artificial scene with a drawing scale ١ : ١٠٠ if the real length of a tree is ٨ meter, Find its length in the picture .</p> <p>b) A container has ١٢ litre of honey , It is wanted to put them in smaller vessels (bottles) the capacity of each of them is ٤٠٠ cm^٣ . Calculate the number of bottles which is needed for that .</p>														
(٥))	<p>a) The opposite figure shows a parallelogram in which $m(\angle B) = ١١٠^\circ$, $m(\angle DAC) = ٣٠^\circ$, Find : $m(\angle D)$, $m(\angle BAC)$.</p> <p>b) The following table shows the extra money which ١٠٠ workers got in a month in a factory . They are as follows .</p> <table><tr><td>The extra money</td><td>٢٠-</td><td>٣٠-</td><td>٤٠-</td><td>٥٠-</td><td>٦٠-</td><td>Total</td></tr><tr><td>Number of worker</td><td>٢٠</td><td>١٥</td><td>٣٠</td><td>٢٥</td><td>١٠</td><td>١٠٠</td></tr></table> <p>١- What are the number of workers who obtained extra money less than ٥٠ pounds .</p> <p>٢- Draw the frequency curve of this distribution .</p>	The extra money	٢٠-	٣٠-	٤٠-	٥٠-	٦٠-	Total	Number of worker	٢٠	١٥	٣٠	٢٥	١٠	١٠٠
The extra money	٢٠-	٣٠-	٤٠-	٥٠-	٦٠-	Total									
Number of worker	٢٠	١٥	٣٠	٢٥	١٠	١٠٠									

المادة : رياضيات بالانجليزية الزمن : ساعة و نصف	امتحان ﴿ نصف العام ﴾ للف السادس الابتدائي (العام) للعام الدراسي (١٤٣٣ هـ - ٢٠١٢ م)	جمهورية مصر العربية محافظة الإسكندرية مديرية التربية والتعليم
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Answer the following questions

١) Complete the following:

- a) ٤.٦ Litre = milliliter.
- b) If the numbers ٤ , x , ١٢ , ١٨ are proportional , Then the value of x =
- c) The two diagonals are equal in length in each of and
- d) If the values of a frequency distribution lie between (٢٠ , ٥٩) then the range of this distribution =

٢) Choose the correct answer:

- a) If $\frac{x}{300} = ٩\%$ then , x = (١٢ or ٢٧ or ٨١ or ١٨)
- b) The opposite data are quantative except (age or Tallness or colour or weight)
- c) If the ratio among the measurements of the angles of a triangle is ١ : ٢ : ٣ then the measure for the smallest angle equals (٤٥° or ٣٠° or ٦٠° or ٩٠°)
- d) The volume of a Cuboid equals ٤٠٠ cm^٣ and its base is with length = ٨ cm and width = ٥ cm then its height equalscm (١٠ or ٢٠ or ٤٠ or ٨٠)

٣) a) A cube shaped vessel , its internal edge length is ٣٠ cm. It is filled with food oil ,

١) Calculate the capacity of the vessel in litres.

٢) If the price of one litre of food oil is ٩ pounds, Calculate the price of all oil.

b) Find the buying price of good sold for L.E. ٢٦٨٨ and the percentage of profit is ١٢%, and find the profit.

٤) a) A factory produce ٩٠٠٠ bottles of soft drink in ١٢ hours,

What is the rate of production per hour ?

b) The opposite figure:

XYZL is a Parallelogram in which
 $m(\angle Y) = 118^\circ$, $m(\angle YXZ) = 35^\circ$
 and ZY = ٨ cm ,

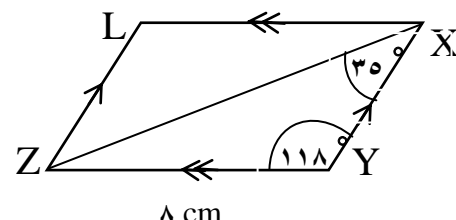
Find without using measuring tools:

١) $m(\angle L)$

٢) $m(\angle LXZ)$

٣) $m(\angle LZY)$

٤) Length of \overline{XL}



٥) a) Ahmed draw a picture to his brother Osama with a drawing scale ١ : ٤٠ . If the real length of Osama is ١٦٠ cm , What is his length in the picture ?

b) The following table shows the marks of ١٠٠ students in one month in math ;

Mark	٢٠ –	٣٠ –	٤٠ –	٥٠ –	Sum
Number of students	١٥	٣٠	٤٠	١٥	١٠٠

١) What is the number of students who record less than ٤٠ marks.

٢) Draw the frequency curve for this distribution.

﴿ انتهت الأسئلة ﴾

المادة : رياضيات بالانجليزية نموذج الإجابة و توزيع الدرجات	امتحان ﴿ نصف العام ﴾ للف السادس الابتدائي (العام) للعام الدراسي (١٤٣٣ هـ - ٢٠١٢ م)	جمهورية مصر العربية محافظة الإسكندرية مديرية التربية والتعليم
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الدرجة الكلية (٤٠ درجة) (وتراعى الحلول الأخرى)

(١) (٨ marks) : (٢ marks for each item)

- a) ٤٦٠٠ b) ٦ c) square and rectangle d) ٣٩

(٢) (٨ marks) : (٢ marks for each item)

- a) ٢٧ b) colour c) ٣٠° d) ١٠

(٣) (٨ marks) :

a) (٤ marks) :

$$\text{The capacity} = \frac{30 \times 30 \times 30}{1000} = ٢٧ \text{ litres}$$

$$\text{The price of the oil} = ٢٧ \times ٩ = ٢٤٣ \text{ pounds}$$

b) (٤ marks) :

Buying price	Profit	Selling price
١٠٠	١٢	١١٢
X		٢٦٨٨

$$\text{The buying price} = \frac{2688 \times 100}{112} = ٢٤٠٠ \text{ pounds}$$

$$\text{The profit} = ٢٦٨٨ - ٢٤٠٠ = ٢٨٨ \text{ pounds}$$

٤) (٨ marks) :

a) (٤ marks)

$$\text{The production rate per hour} = \frac{9000}{12} = ٧٥٠ \text{ bottles / hour}$$

b) (٤ marks)

$$١) m(\angle L) = ١١٨^\circ \quad ٢) m(\angle LXZ) = ١٨٠^\circ - (١١٨^\circ + ٣٥^\circ) = ١٨٠^\circ - ١٥٣^\circ = ٢٧^\circ$$

$$٣) m(\angle LZY) = ٦٢^\circ \quad ٤) XL = ٨ \text{ cm}$$

٥) (٨ marks) :

a) (٤ marks) :

$$\text{The drawing scale} = \frac{\text{The length in drawing}}{\text{The length in reality}}$$

$$\frac{1}{40} = \frac{x}{160}$$

The length in the drawing = $\frac{160 \times 1}{40}$

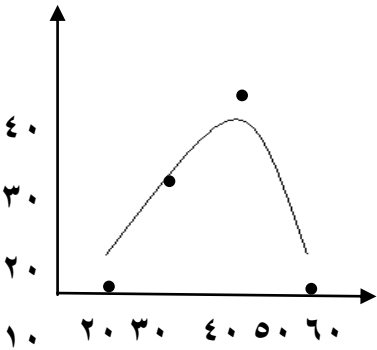
١

١ = ٤ cm ١

b) (٤ marks):

١) The number of students whose marks are less than ٤٠ marks = ١٥ + ٣٠ = ٤٥ students ١

students



٢) Draw the horizontal axis and the vertical axis ١

and each point ١

marks

﴿ انتهى الإجابة ﴾

الفصل الدراسي الأول ٢٠١٥ - ٢٠١٦
الزمن : ساعة ونصف الساعة

امتحان الصف السادس الابتدائي (عام)

الرياضيات بالانجليزية

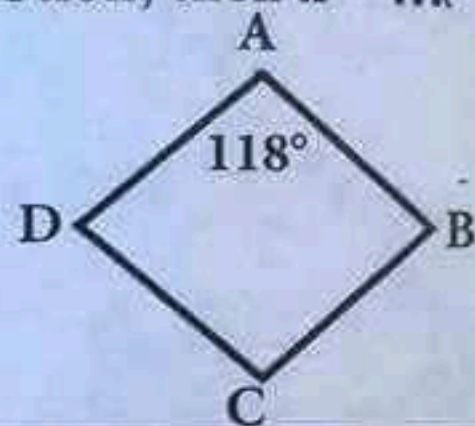
(يسمح باستخدام الآلة الحاسبة)

(Calculator is allowed)

Answer the following questions:-

Question (1) : Complete the following:

- 1 $0.4 : 0.8 = \dots : \dots$ in the simplest form.
- 2 The range of the set of these values 20, 95, 70 and 45 equals....
- 3 If the quantities x , 6, 20 and 30 are in proportion, then $x = \dots$
- 4 In the opposite figure:
ABCD is a rhombus in which
 $m(\angle A) = 118^\circ$,
then $m(\angle B) = \dots^\circ$



Question (2) Choose the correct answer from those given:

- 1 The cuboid has edges [12 , 8 , 6 , 4]
- 2 The given data are quantitative EXCEPT the
[weight , length , nationality , age]
- 3 $1.2 \text{ litres} + 800 \text{ cm}^3 = \dots \text{ litres}$ [2 , 9.2 , 200 , 2000]
- 4 If 100 grams of chocolate give 300 calories. What is the number of calories which are found in 30 grams of the same chocolate?
[90 , 100 , 900 , 9000]

Question (3) :

- a If the length of Sues Canal in a map of drawing scale 1 : 1100000 is 15 cm , then find its real length in kilometers.

(بقية الأسئلة في الصفحة المقابلة)

Three persons involved in a business, the first paid LE 60000 ,
the second paid LE 80000 and the third paid LE 90000 . At the end of the
year the profit was LE 20700 .
Find the share of each person in profit.

Question (4) :

A man bought a flat for LE 100000 , after three years he sold it for LE 130000

Find the percentage of his profit.

In the opposite figure:

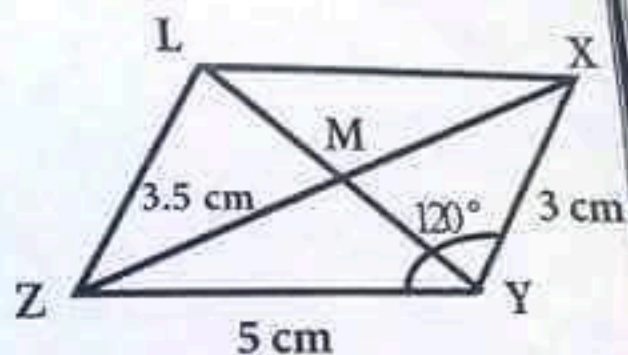
XYZL is a parallelogram in which

$m(\angle XYZ) = 120^\circ$, $XY = 3 \text{ cm}$,

$YZ = 5 \text{ cm}$ and $ZM = 3.5 \text{ cm}$ Find :

(1) $m(\angle XLZ)$

(2) Perimeter of the triangle XLZ



Question (5) :

a A container contains 12 litres of Honey. It is wanted to pour it in small
bottles the capacity of each of them is 400 cm^3 . Calculate the number of
bottles which are needed for that.

b The following table shows the marks of 100 pupils in Mathematics in a
month.

The marks	20-	30-	40-	50-60	Total
Number of pupils	10	30	40	20	100

Draw the frequency polygon for this distribution.

(انتهت الأسئلة مع خالص الدعاء بالنجاح والتوفيق)

(Calculator is allowed)

Answer the following questions:-

Question (1) : Complete the following:

- $0.4 : 0.8 = \dots : \dots$ in the simplest form.
- The range of the set of these values 20, 95, 70 and 45 equals....
- If the quantities x , 6, 20 and 30 are in proportion, then $x = \dots$
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then $m(\angle B) = \dots^\circ$



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- If 100 grams of chocolate give 300 calories. What is the number of calories which are found in 30 grams of the same chocolate?
[90 , 100 , 900 , 9000]

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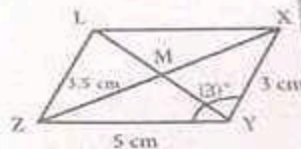
- If the length of Suez Canal in a map of drawing scale 1 : 1100000 is 15 cm , then find its real length in kilometers.

(بقية الأسئلة في الصفحة التالية)

- Three persons involved in a business, the first paid LE 60000 , the second paid LE 80000 and the third paid LE 90000 . At the end of the year the profit was LE 20700 .
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Draw the frequency polygon for this distribution.

(انتهت الأسئلة مع خاتمة الدعاة بالنجاح والتوفيق)